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MARINE CORPS ORDER P7000.14K

From: Commandant of the Marine Corps
To: Distribution List

Subj: MARINE CORPS COST FACTORS MANUAL

Ref: (a) MCO 7000.12A

Encl: (1) LOCATOR SHEET

1. Purpose. To provide a convenient and reliable source of general cost data of various activities for use in developing costs of alternative courses of action.

2. Cancellation. MCO P7000.14J.

3. Background. This Manual is designed to facilitate the rapid estimation of selected costs for planning, programming, decisionmaking, and cost and economic analyses. The reference pertains. The factors contained in this Manual have a wide variety of applications and can be used in numerous combinations to meet given requirements. For best results, locally derived cost factors governing specific situations should be used in conjunction with this Manual. This Manual is a tool for the commander/resource manager to improve the efficiency and effectiveness of the Marine Corps.

4. Summary of Revision. The majority of changes were in updating the information in the tables.

5. Action. Marine commanders and resource managers are encouraged to use this Manual in the estimation of costs in the planning and programming processes, in cost and economic analyses and in programs designed to improve cost consciousness. (NOTE: This Manual should not be used in budget formulation or as a substitute for normal staffing.)

6. Recommendations. Recommendations concerning this Manual are invited and will be submitted to the Commandant of the Marine Corps (FBD) via the appropriate chain of command or call, commercial (703) 614-2206/AUTOVON 224-2206.

7. Reserve Applicability. This Manual is applicable to the Marine Corps Reserve.

8. Certification. Reviewed and approved this date.

E. T. COMSTOCK
Fiscal Director of
the Marine Corps

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ENCLOSURE (1)

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Received	Date Entered	Signature of Person Entering Change

MARINE CORPS COST FACTORS MANUAL

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This chart is included to assist the reader in quickly determining the types of data contained in the Manual. Refer to individual sections and tables for specifics as to data composition and methodology of computation.

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CHAPTER 1

INTRODUCTION

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CHAPTER 1

INTRODUCTION

1000. ORGANIZATION

1. This Manual is organized conceptually as follows:

a. An introduction to the manual:

Chapter 1-INTRODUCTION

b. General data by functional area:

Chapter 2-MANPOWER

Chapter 3-TRAINING

Chapter 4-LOGISTICS

c. Data by type organization:

Chapter 5-STANDARD ORGANIZATIONS

Chapter 6-NOTIONAL TASK FORCES

d. Cost adjustment data:

Chapter 7-COST COMPARISONS AND PROJECTIONS

e. Supporting reference material:

APPENDIX

A-Sources of Marine Corps Support and Funding

B-Life-Cycle-Cost (LCC)

C-Glossary

2. Chapters 2 through 7 are subdivided into sections and/or tables to facilitate their use. Content and Introduction pages are provided for each chapter and section to describe its contents and use. Cost factors are provided in tables in appropriate chapters and sections. Footnotes define terms, explain data formulation and sources, indicate the HQMC office of Prime Responsibility (OPR) for the tables, and provide other valuable information. The tables are marked with an alphanumeric code, which indicates the chapter or section, and sequence within a chapter or section as appropriate. For instance, Table 4B2 indicates it is the second table in Section B of chapter 4.

1001. NATURE OF DATA

1. The data provided reflect either established figures (e.g., base pay) or computed figures (e.g., cost of operating and maintaining equipment). Computed cost data are average costs as opposed to marginal costs. For first approximations in general planning, these estimates may normally be used in lieu of marginal figures. Additional analysis would be necessary to obtain marginal data, which may be required for detailed planning and programming.

2. Extreme climatic or unusual environmental conditions were not considered in the formulation of the cost factors. Adjustment of factors, based on judgment and past experience, may be required to cover such situations.

3. Information is provided in each table as to the dates the factors were computed. Adjustments may be necessary to account for such things as inflation, time value of money, pay raises, and organizational changes. Other adjustments which may be required should be based on current valid data.

4. With the exception of such data as pay and entitlements, most information contained in this Manual is applicable only to the peacetime Marine Corps. Wartime force structures, consumption rates, etc., could be considerably different from those reflected in this Manual.

5. Most of the cost factors were computed from actual expense data. When such data was not available, budge data was used.

In some cases, where only aggregated summary data was available, the cost factors were derived through allocation.

6. The cost factors pertain to classes of personnel or types of equipment, organizations, or activities rather than to appropriations or operating budgets; therefore, most of the computed figures do not relate directly to those in Marine Corps budgets. In general, these cost factors are not for use in budget formulation.

1002. USE

1. This Manual was designed to facilitate the rapid estimation of selected costs for planning, programming, and cost and economic analyses (see the current edition of MCO 7000.12). The factors can be used in a wide variety of applications and in numerous combinations. For instance, the factors can be used in computing life-cycle costs (see appendix B) and in analyses such as the following:

a. Operations in peacetime.

b. Actual or planned changes in Marine Corps personnel levels, organization/structure, equipment, training, and manpower policies.

2. The following steps should normally be followed in conducting a cost analysis through the use of this Manual:

a. Determine precisely the areas to be costed and the degree of detail required. For instance, it may suffice in one case to address merely the total number of Marines involved, whereas in another case it may be necessary to deal with grades and entitlements.

b. Review this Manual thoroughly to understand fully its use and limitations. Particular attention should be paid to the introduction of each chapter and section. This review will improve the validity of results and minimize overall efforts.

c. Consult the table of contents to determine which tables would provide the required information.

d. Compute the estimated expense for each costing area using the factors contained in this Manual. If additional accuracy is required and time allows, the following refinements can be undertaken:

(1) Use any locally derived factors which may be

more valid for a specific situation than the general factors contained in this Manual.

(2) Adjust cost data for inflation and time value of money, using Tables 7A1 and 7A2, respectively. (Each table contains information as to the date the factors were computed and/or expected to be valid without adjustment. Annual updates of this Manual are planned.)

(3) Modify data to account for any significant changes in costs which may have occurred since the last update of this Manual.

(4) Adjust data, if necessary, to compensate for unusual situations. For instance, if a proposed training exercise in the Arctic were being costed, it might well be assumed fuel consumption would be higher than the average rates given in this Manual. If greater accuracy is needed it would be appropriate to adjust the factors based on judgments and past experience.

e. Contact the OPR, which is designated in each table, if questions arise.

f. Add the figures derived for each costing element to determine total cost. Use Table 7A2, Present Value/Discount Factors, if cost comparisons are desired for alternative courses of action in which funding would be made over three or more years.

g. Include in the costing report a complete explanation of how costs were computed with a list of assumptions which were made to facilitate the estimate. This information is invaluable to decisionmakers who must judge the validity of the analysis.

3. The following example, using hypothetical numbers, illustrates the use of this Manual:

a. Problem. To estimate the Marine Corps costs of adding a fourth, full strength, rifle company to an infantry battalion (initial one time or startup costs).

b. Approach. The approach to this problem will be to first make a rough estimate of the cost and then to show how various refinements make the estimate more accurate.

c. Rough Estimate

(1) Assumptions. The initial estimate will use the

following assumptions:

(a) That the equipment needed is onhand at the base.

(b) That no personnel will be added to other organizations to support the new company.

(c) That the company will be added at full T/O (six officers, 176 enlisted (see Table 5A1A).

(d) That there will be no Marine Corps end strength increase. All personnel are assumed to be taken from other, existing assets stationed at other bases in CONUS. Opportunity costs will be considered.

(e) That only Marine Corps costs are at issue. Navy costs for corpsmen are not considered.

(2) Calculation. With the foregoing assumptions, the calculation becomes relatively simple. The main cost comes from transferring the personnel from all over CONUS. Assuming the average cost of operational moves is $8,043 for officers, and $2,547 for enlisted (see Table 2D1 for actual costs).

Six officers times $8,043 per move = $48,258

167 enlisted times $2,547 per move = $425,349

the total cost would be $473,607.

d. Refined Estimate. Clearly, the assumptions used in the initial estimate are too simple for many situations. Accordingly, the above assumptions can be refined to make the estimate better fit the actual situation.

(1) Equipment Transportation. In the example, it was assumed all the equipment was onhand. In reality, the equipment may be in storage at one of the logistics bases. Accordingly, assume the unit being created is at Camp

Lejeune, and the equipment is in storage at MCLB Albany. Assume a company’s equipment weighs 10 tons, and the cost per ton mile by rail cargo over 10,000 pounds is $0.049 (see Table 4D12 for actual costs). The local transportation office estimates the distance from Camp Lejeune to MCLB Albany to be 544 miles. The computation would be as follows:

10 tons times 544 miles times .049 per ton mile = $266.56

(Note: This assumes there are no additional costs for loading or unloading equipment.)

(2) Equipment Purchase. A set of equipment may not be "free". It must be either drawn from existing stores, and therefore have to be replaced, or it must be procured new. In either case, assume the cost of a set of equipment is $673,000 (see Table 5A1B for actual cost).

(3) Support Billets. In the initial estimate, it was assumed no support personnel would be added. This is not realistic. Assume the H&S Company would require 23 additional enlisted personnel to support the new company. The cost of transferring these individuals would be:

23 enlisted times $2,547 per enlisted move = $58.581

(4) Transfer from Overseas. The assumption that all the Marines required would come from bases within CONUS may or may not hold true. Accordingly, assume 10 percent of them would have to come from overseas. The revised transfer case would be as follows:

five officers from within CONUS times $8,043 per move	= $ 40,215
150 enlisted from within CONUS times $2,547 per move	= $382,050
one officer from overseas times $8,916 per move	= $ 8,916
17 enlisted from overseas times $2,494 per move	= $ 42,398
	$473,579

(5) End Strength Increases. The situation may be that the new company would be staffed by increasing the Marine Corps' end strength rather than reallocating existing assets. Costing this can be difficult since some grades such as captains and first sergeants cannot be created from scratch. Assume the cost of this end strength increase is as follows:

Cost of:

167 new enlisted	times $3,711 accession	= $ 619,737
	times $14,320 recruit training	= $2,391,440
	times $5,598 Marine Combat Training	= $ 934,866
		$3,946,043

six new officers	times $7,749 accession	= $ 46,494
	times $12,434 accession training	= $ 74,604
	times $36,946 The Basic School	= $ 221,676
	times $13,915 Infantry Officer Trng	= $ 83,490
		$ 426,264

Total cost of increased end strength = $4,372,307

(Note: See Table 2E1 for actual accession costs, Table 3A1 for actual costs of schools/training.)

(6) Summary of Refined Estimate

	WITH TRANSFERS	WITH ACCESSIONS
Equipment Transportation	= $ 267	= $ 267
Equipment Purchase	= $ 673,000	= $ 673,000
Support Billets	= $ 58,581	= $ 58,581
Transfers	= $ 473,579	= $ 0
or		
End Strength Increase	= $ 0	= $4,372,307
	$1,205,427	$5,104,155

e. Comparison. The contrast between the rough estimate of $473,579 and the refined estimates of $1,205,427 and $5,104,155, clearly demonstrates the value of realistic cost estimates. The data in this Manual is specifically designed to allow the user to make a cost estimate at whatever level (rough to refined) is required. By tailoring the data in this Manual for the local situation and combining the results with common sense, relative cost information can be developed for virtually all situations.

CHAPTER 2

MANPOWER

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SECTION F: SUPPORT COSTS

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NOTE: "OPR" ON TABLES STANDS FOR OFFICE OF PRIME RESPONSIBILITY

CHAPTER 2

MANPOWER

2000. GENERAL

1. This chapter provides data pertaining to Marine Corps manpower costs. The information is presented in six sections as follows:

A. Military Personnel Costs

B. Civilian Personnel Costs

C. Advisory Service Costs

D. Permanent Change of Station (PCS)/Travel

E. Military Personnel Accessions

F. Support Costs

2. The particular characteristics, formulation, and use of data are explained in each section. Tables with explanatory footnotes that include sources of data and OPR, are included as appropriate.

CHAPTER 2

MANPOWER

SECTION A: MILITARY PERSONNEL COSTS

2100. INTRODUCTION

1. The largest and most visible military personnel cost is for pay and allowances, but there are other significant military personnel expenses. Although the kinds of personnel costs incurred by military personnel are similar to those incurred by civilian employees, non-pay personnel costs are proportionally larger for the former than for the latter.

2. This section contains data pertaining to various types of military personnel costs by pay grade. This data includes not only compensation, but also the cost of military benefits and support. Data for pricing military labor on an hourly, daily, or monthly basis and the amounts authorized for special types of pay, enlistment/reenlistment bonuses, and rations are provided.

2101. DATA USE

1. The primary intent of the data contained in this section is the estimation of the average man-year cost, in general, of military manpower. These costs are particularly useful when available local data or time is insufficient to permit a more specific estimate.

2. Care must be exercised in using the total column of Tables 2A1 and 2A2, as some of the cost elements may not be applicable in all cases.

3. Table 2A3 provides military labor rates for processing work which is expressed as units of time.

4. Tables 2A4 through 2A6 are useful for estimating the cost of monetary incentives. However, the cost data contained in these Tables are not to be added to those in Tables 2A1, 2A2, or 2A3, as they are already included as part of the composite standard rate, which is the basis for Tables 2A1, 2A2, and 2A3.

5. Table 2A7 can be used in estimating ration cost for a dining facility or for the approximate cost of rations related to a field exercise. Additionally, the individual entitlement/ reimbursement data can be employed for overall fiscal planning or general knowledge/information.

6. Table 2A8, Composite Personnel Rates for the Selected Marine Corps Reserve (SMCR), is designed so the cost impact of changing the number of drills or the length of annual training duty can be easily determined.

7. Table 2A9 is provided for information only. It contains data on "Regular Military Compensation" which approximates what is considered "salary" in the civilian world. It should not be used for economic analyses, but can be used by Marines when applying for loans and credits.

8. In costing military personnel, it is important to recognize the costs fall into two broad classes: mission and overhead support tail. Overhead support tail includes those who provide administrative support services and those (patients, prisoners, transients and students) who are temporarily unavailable for work.

Table 2A1. -- AVERAGE OFFICER MANPOWER COST FOR [illegible]
End of Apr 1990

PAY GRADE	PAY AND ALLOWANCES 1/	RETIREMENT 2/	UNEMPLOYMENT COMPENSATION 3/	AVERAGE SUP 4/	INCOME TAX WITHHOLDING 5/	DEPENDENCY & INDEMNITY COMPENSATION 6/	TOTAL
O-10	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
O-9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
O-8	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
O-7	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
O-6	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
O-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
O-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
O-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
O-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
O-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
W-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
W-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
W-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
W-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

There is no clear calculation for the total cost of fielding a Marine. However, this table gives a usable approximation of the total cost. It is important to note this is the total cost to the Government. Only the standard rate, average support, and retirement are paid by the Marine Corps. This table is directly comparable to Tables 2B1-2B4 on civilian manpower costs.

1/ The annual pay and allowance rate consists of all items in the MPMC appropriation (except retired pay accrual, which is shown in a separate column), and average annual PCS travel of $5,548.

2/ Calculated using the DoD standard method: 43.9 percent of base pay for officers and enlisted.

3/ Unemployment compensation is paid to ex-servicemen under a special Department of Labor program. Cost for unemployment compensation, and dependency and indemnity compensation are based on the DoD report "Average Cost of Military and Civilian Manpower (FY 80)" escalated to FY 89. Amounts are allocated to grade based on number of separations; hence the amounts in each grade differ.

4/ This is the average cost per Marine man-year for support provided by Marine Corps bases and air stations. Only O&MMC

amounts are included. This figure was calculated by taking the total support cost and dividing by the number of man-years. The total support cost was calculated by adding the following FYDP PEN's: 26494M, 26495M, 26496M, 72891M, 72894M, 72895M, 72896M, 85794M, 85795M, 85796M, 91294M, 91295M, and 91296M. When estimating the cost of increasing or decreasing the FMF population, the incremental support cost of $1,256 ($553 per man-year for unit operating cost, $664 per manyear for base support costs, and $39 per man-year for base

communications) should be substituted for the average support cost of $3,988. To avoid double counting, neither the $1,256 nor the $3,988 should be included when this table is used with Table 2F1.

5/ Income tax advantage is the additional income military personnel would have to receive in order to be left with their current disposable income (take-home pay) if their allowances were taxable. Federal income tax is computed using the standard deduction and 1989 tax rates.

6/ Dependency and indemnity compensation is paid by the Veterans' Administration to survivors of deceased military personnel. Prior year costs are escalated to FY89.

Data Sources: Military Personnel, Marine Corps FY90 President's Budget Submission of January 1990; DoD Report of Average Cost of Military and Civilian Manpower (1981), FY-90 Composite Standard Rates (Jan 1990); Dod Report on Selected Military Compensation Tables (January 1989 Pay Rates).

OPR: CMC (FDB-MPMC), Phone (703) 614-5524, AUTOVON 224-5524

TABLE 2B2. -- AVERAGE ENLISTED MANPOWER COST FOR FY91
(As of Apr 1990)

PAY GRADE	PAY AND ALLOWANCES 1/	RETIREMENT 2/	UNEMPLOYMENT COMPENSATION 3/	[illegible] SUPPORT 4/	[illegible] AVERAGE 5/	[illegible] COMPENSATION 6/	TOTAL
E-9	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]
E-8	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]
E-7	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]
E-6	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]
E-5	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]
E-4	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]
E-3	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]
E-2	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]
E-1	[illegible]	[illegible]	[illegible]	1,543	[illegible]	[illegible]	[illegible]

There is no clear calculation for the total cost of fielding a Marine. However, this table gives a usable approximation of the total cost. It is important to note this is the total cost to the Government. Only the standard rate, average support, and retirement are paid by the Marine Corps. This table is directly comparable to Table 2B1-2B4 on civilian manpower costs.

1/ The annual pay and allowance rate consists of all items in the MPMC appropriation (except retired) pay accrual, which is shown in a separate column), and average annual PCS travel of $1,404.

2/ Calculated using the DoD standard method: 43.9 percent of base pay for officers and enlisted.

3/ Unemployment compensation is paid to ex-servicemen under a special Department of Labor program. Cost for unemployment compensation, and dependency and indemnity compensation are based on the DoD report "Average Cost of Military and Civilian Manpower (Fy80)" escalated to FY90. Amounts are allocated to grade based on number of separations; hence the amounts in each grade differ.

4/ This is the average cost per Marine man-year for support provided by Marine Corps bases and air stations. Only O&MMC amounts are included. This figure was calculated by taking the total support cost and dividing by the number of man-years. The total support cost was calculated by adding the following FYDP PEN's: 26494M, 26495M, 26496M, 72891M, 72894M, 72895M, 72896M, 85794M, 85795M, 85796M, 91294M,

91295M, and 91296M. When estimating the cost of increasing or decreasing the FMF population, the incremental support cost of $1,256 ($553 per man-year for unit operating cost, $664 per man-year for base support costs, and $39 per man-year for base communications) should be substituted for the average support cost of $1,543. To avoid double counting, neither the $1,256 nor the $1,543 should be included when this table is used with Table 2F1.

5/ Income tax advantage is the additional income military personnel would have to receive in order to be left with their current disposable income (take-home pay) if their allowances were taxable. Federal income tax is computed using the standard deduction and 1989 tax rates.

6/ Dependency and indemnity compensation is paid by the Veterans' Administration to survivors of deceased military personnel. Prior year costs are escalated to FY90.

Data Sources: Military Personnel, Marine Corps FY90 President's Budget Submission of January 1990; DoD Report of Average Cost of Military and Civilian Manpower (1981), FY90 Composition Standard Rates (Jan 1990); DoD Report on Selected Military Compensation Tables (January 1990 Pay Rates).

OPR: CMC (FDB-MPMC), Phone (703) 614-5524, AUTOVON 224-5524

Table 2A3 - MARINE CORPS FY90 COMPOSITE STANDARD RATES (1)
(as of Nov 1990)

PAY GRADE	ANNUAL RATE-	MONTHLY RATE-	DAILY RATE-	HOURLY RATE-
0-10	124,481	10,373	478.77	59.85
0-9	122,622	10,219	471.62	58.95
0-8	122,084	10,174	469.55	58.69
0-7	117,706	9,809	452.72	56.59
0-6	100,900	8,408	388.08	48.51
0-5	86,692	7,224	333.43	41.68
0-4	72,818	6,068	280.07	35.01
0-3	61,900	5,158	283.08	29.76
0-2	49,483	4,124	190.32	23.79
0-1	36,697	3,058	141.14	17.64
W-4	65,495	5,458	251.90	31.49
W-3	54,929	4,577	211.27	26.41

W-2	44,689	3,724	171.88	21.49
W-1	43,227	3,602	166.26	20.78
E-9	57,294	4,775	220.36	27.55
E-8	46,873	3,906	180.28	24.54
E-7	40,768	3,397	156.80	19.60
E-6	34,866	2,906	134.10	16.76
E-5	30,068	2,506	115.65	14.46
E-4	25,652	2,138	98.66	12.33
E-3	21,406	1,784	82.33	10.29
E-2	18,763	1,564	72.17	9.02
E-1	16,427	1,369	63.18	7.90

1/ Average cost of MPMC appropriation items of pay, allowances, retirement, and unemployment (enlisted only) attributable to each pay grade. The annual rate also includes PCS costs as directed by NavCompt.

2/ Monthly, daily, and hourly rates were derived by dividing the annual rate by 12, 260, and 2,080 respectively.

Data Source: NavCompt Note 7041

OPR: CMC (FDB-MPMC), Phone (703) 614-5524, AUTOVON 224-5524

Table 2A4 - SPECIAL TYPES OF PAY(1)
(AS OF APR 1990)

SPECIAL DUTY ASSIGNMENT PAY

	OFFICER	ENLISTED
CAREER PLANNER	N/A	660 (55)
MARINE SECURITY GUARD	N/A	1320 (110)
DRILL INSTRUCTORy	N/A	(165, 220)
RECRUITER(3)	N/A	(165, 220, 275)
DEMOLITION DUTY	1320 (110)	1320 (110)
HOSTILE FIRE/IMMINENT DANGER PAY	1320 (110)	1320 (110)
DIVING DUTY PAY	1800 (150)	1320 (110)
PARACHUTE JUMPING	1320 (110)	1320 (110)
PARACHUTE JUMPING (HA)	1980 (165)	1980 (165)
FOREIGN DUTY PAY(4)		
E-7/8/9		270 (23)

E-6	240	(20)
E-5	192	(16)
E-4	156	(13)
E-3	108	(9)
E-2	96	(8)
E-1	96	(8)

1/ Common annual entitlements for eligible officer and enlisted personnel monthly entitlements are shown in parentheses.

2/ Drill instructor duty pay is based on job tenure at the following rates: 0-3 months, $165; over 6 months, $220.

3/ Recruiting duty pay is based on job tenure at the following rates: 0-3 months, 3-9 months, $220; OVER 9 months, $275.

4/ Applicable to enlisted personnel who are assigned to duty at certain designated locations.

Data Source: DoDPM Military Pay and Allowance Entitlements Manual

OPR: CMC (MPP), Phone (703) 614-1519, AUTOVON 224-1519

TABLE 2B5 FLIGHT PAY[1]
(AS OF APR 1990)

OFFICER PERSONNEL

	[illegible][2]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ACIP[3]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ENLISTED PERSONNEL

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Common annual entitlements for eligible officer and enlisted personnel.

2/ Officers with more than 25 years officer service are not entitled to draw ACIP unless below the pay grade 0-7 and

assigned to an operational flying billet. This does not apply to Warrant Officers.

3/ Crew flight pay for officers is based on such things as years of flight duty, years of commissioned service, and grade. The figures provided in this table are estimates of what a typical Marine in each grade receives. As such, these figures are for general planning only; data for specific individuals should be obtained from Marine Corps Disbursing personnel.

Data Source: DoD Military Pay & Allowance Entitlements Manual & FY90 Authorization Act

OPR: CMC(MPP), Phone (703) 614-1519, AUTOVON 224-1519

Table 2A6. - [illegible]
(As of JAN 1990)

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	See current section of MCO for current award levels and eligible [illegible]	Lump Sum	See current [illegible] of MCO [illegible]
[illegible]	Monthly basic pay x years of addit. prof. [illegible] x multiple	[illegible] Lump Sum/remainder in [illegible]	See current [illegible] of MCO [illegible] and [illegible]

Data Source: DoD Military Pay Allowance Entitlements Manual.

OPR: CMC (MPC), Phone (703) 614-5689, AUTOVON 224-5689

Table 3A7. - COST OF RATIONS[1]
(FY90)

TYPE OF RATIONS ISSUE	AVERAGE STRENGTH	COST RATE
Subsistence in Dining Facility ("A" or "B" rations)[2]		
CONUS	[illegible]	$[illegible]
OVERSEAS	[illegible]	$[illegible]
		MRE
Operational Rations (MRE issue, [illegible] basis)		
Non-FMFPac Operations and Training[3]		$11.57
FMFPac Operations and Training		$11.57
Subsistence Allowance		
Authorized to Subsist Officers	[illegible]	$[illegible]
Civ	[illegible]	$[illegible]
E-1 under 4 months	[illegible]	$[illegible]
Rations-in-Kind Not Available	[illegible]	$[illegible]

[illegible] MEALS[5] RATES FOR INDIVIDUALS[6]

MEALS	FOOD (Value) E-1[4] PERSONNEL	FOOD (Value) OTHER AUTHORIZED PERSONNEL	SUBSISTERS[5] NOT RECEIVING PER DIEM	SUBSISTERS[5] RECEIVING PER DIEM
Breakfast	[illegible]	$0.[illegible]	$[illegible]	$[illegible]
Lunch	1.25	0.85	[illegible]	[illegible]
Dinner	1.65	0.85	[illegible]	[illegible]
Brunch	1.25	0.95	[illegible]	[illegible]
Dinner/Brunch	[illegible]	1.45	[illegible]	[illegible]
Holiday Meal	[illegible]	[illegible]	[illegible]	[illegible]

1/ A ration is -day's food for an individual. Types of rations are: "A" (canned/packaged goods with perishable items, prepared in dining facility); "B" (same as "A" without perishable items); and Meal Ready to Eat (MRE) (individual packaged meal designed to be prepared by the individual). The cost of rations is paid from the Military Personnel, Marine Corps appropriation and is included in the standard composite rates (Tables 2A1, 2A2, and 2A3)

2/ Approximately 47 percent of CONUS and overseas personnel authorized to subsist, do not do so. Cost included in annual standard composite rates given in Table 2A2.

3/ Non-FMFPac included FMFLant and all other commands outside FMFPac.

4/ MCO P10110.14K and Marine Corps bulletins in the 10110 series outlines who may purchase rations.

5/ Applicable to officers and civilians only. Not applicable when meals are prepared and served in the field.

6/ Defined in Marine Corps bulletins in the 10110 series.

Data Sources: Marine Corps FY90 Budget and Marine Corps bulletins in the 10110 series.

OPR: CMC (FDB), Phone (703) 614-5524, AUTOVON 224-5524

Table 2A3 - COMPOSITE PERSONNEL RATES FOR SMCR (FY90)/91

PAY GRADE	COST PER DRILL 2/		COST PER DAY OF ATD 2/		INACTIVE DUTY TRAINING 3/		GENERAL TRAINING 3/		PERSONNEL FIXED	TOTAL		TOP SMC AVERAGES
	GROUND	AIR	GROUND	AIR	GROUND	AIR	GROUND	AIR		GROUND	AIR	
O-7	$191.70	$196.57	$221.29	$226.55	$9,437.00	$11,589.00	$5,699.00	$7,791.00	$3,862.00	$16,998.30	$18,242.00	$17,914.00
O-6	$177.29	$180.45	$189.32	$195.35	$7,637.00	$9,101.00	$5,107.00	$5,299.00	$3,862.00	$17,664.30	$18,289.00	$15,475.00
O-5	$132.76	$179.25	$159.55	$176.05	$6,637.00	$8,221.00	$2,795.00	$5,002.00	$3,862.00	$15,225.30	$15,086.00	$14,158.00
O-4	$111.62	$133.45	$138.25	$157.37	$5,625.00	$7,466.00	$2,612.00	$2,727.00	$3,862.00	$11,865.30	$14,055.00	$12,362.00
O-3	$92.27	$113.05	$113.26	$134.75	$4,675.00	$5,559.00	$2,057.00	$2,537.00	$3,862.00	$10,595.30	$12,780.00	$11,588.00
O-2	$72.23	$79.15	$87.37	$96.25	$3,725.00	$4,265.00	$1,674.00	$1,706.00	$3,862.00	$9,261.30	$11,495.00	$9,567.00
O-1	$48.14	$53.34	$61.55	$66.73	$2,545.00	$3,419.00	$1,264.00	$1,362.00	$3,862.00	$7,697.30	$9,242.00	$8,371.00
W-4	$136.27	$137.96	$162.05	$169.79	$5,328.00	$7,490.00	$2,285.00	$2,609.00	$3,862.00	$11,451.30	$15,670.00	$15,577.00
W-3	$95.92	$110.34	$116.24	$135.41	$4,265.00	$5,146.00	$1,908.00	$2,272.00	$3,862.00	$10,565.30	$12,320.00	$11,128.00
W-2	$70.69	$77.56	$85.72	$95.37	$3,257.00	$4,280.00	$1,759.00	$1,811.00	$3,862.00	$9,262.30	$11,473.00	$9,439.00
W-1	$62.46	$60.06	$79.86	$67.25	$3,255.00	$4,637.00	$1,567.00	$1,639.00	$3,862.00	$8,678.30	$9,828.00	$9,252.00
E-9	$66.41	$67.37	$116.82	$117.74	$4,142.00	$4,486.00	$2,113.00	$2,179.00	$3,862.00	$10,663.30	$11,727.00	$10,595.00
E-8	$70.74	$75.11	$85.72	$97.43	$3,412.00	$4,434.00	$1,711.00	$1,819.00	$3,862.00	$9,183.30	$11,399.00	$9,176.00
E-7	$59.94	$64.21	$81.15	$85.83	$2,553.00	$3,830.00	$1,575.00	$1,641.00	$3,862.00	$8,328.30	$8,993.00	$8,461.00
E-6	$53.10	$57.17	$66.18	$72.15	$2,375.00	$3,302.00	$1,381.00	$1,440.00	$3,862.00	$7,568.30	$7,804.00	$7,486.00
E-5	$40.61	$43.34	$59.54	$62.57	$1,562.00	$2,172.00	$1,262.00	$1,298.00	$3,862.00	$7,075.30	$7,272.00	$7,172.00
E-4	$35.06	$38.69	$49.96	$52.95	$1,363.00	$1,869.00	$1,157.00	$1,151.00	$3,862.00	$6,777.30	$6,882.00	$6,297.00
E-3	$30.25	$33.62	$44.72	$47.43	$1,157.00	$1,517.00	$1,025.00	$1,001.00	$3,862.00	$6,109.30	$6,429.00	$5,649.00
E-2	$27.06	$29.85	$39.38	$42.33	$1,313.00	$1,489.00	$992.00	$993.00	$3,862.00	$6,125.30	$6,270.00	$5,209.00
E-1	$24.12	$26.91	$36.04	$38.79	$1,175.00	$1,755.00	$698.00	$690.00	$3,862.00	$5,957.30	$6,096.00	$5,316.00

1/ This table allocates to grade the RPMC funded costs of the SMCR for FY90. All FY90 costs in RPMC Budget Activity 1 (Unit and Individual Training and Budget Activity II (Other Training and Support), except Platoon Leaders Class and Junior ROTC were included.

2/ The following are included in cost per drill: basic pay, retired pay accrual, flying duty pay, and enlisted subsistence-in-kind. cost per day of ATD includes the preceding costs plus basic allowances for quarters, employer's FICA, and subsistence. ATD cost per day does not include travel paid per diem costs.

3/ Inactive duty training consists of the 48 regularly scheduled paid drills plus additional paid drills used for maintaining MOS proficiency and for planning and administrating unit training. Funds for additional paid drills are budgeted on the basis of estimated number of drill periods. Officer and enlisted personnel costs are separately identified, but the information available does not permit allocation by grade. A cost per officer/enlisted manyear, therefore, was used. This cost was calculated by dividing the amount budgeted for additional paid drills for officers and enlisted personnel, respectively, by the number of officers and enlisted personnel in SMCR units. Inactive duty training costs were estimated by multiplying the cost per drill for each grade by 48 and adding for officers (air) $1058, officers (ground) $238, and enlisted (air) $3 and enlisted (ground) $16, for the cost of additional paid drills.

4/ ATD is used primarily for unit training. The ATD period consists of 14 day's training and 1 day's travel. ATD costs were estimated by multiplying the cost per day of ATD by 15 and adding $363 for officers and $358 for enlisted personnel to cover travel and per diem costs.

5/ The personnel pipeline consists of activities that are not directly associated with SMCR units, but which indirectly support them by increasing the military proficiency of individual selected reservists. The personnel pipeline includes Reserve pay categories F and P, mobilization training, school tours, special training, and administration and support. costs include pay and allowances, employer FICA, subsistence, uniforms, and travel and per diem. Since these costs support the SMCR as a whole, the total was divided by the number of officers and enlisted personnel to obtain cost per man-year. Pipeline costs for air and ground are the same for both officers and enlisted personnel.

6/ This averages air and ground components to arrive at an average cost per grade.

Data source: RPMC Presidential Budget Submission, Jan 1990.

OPR: CMC (Code MO-B) phone (703) 614-1840, AUTOVON 224-1840

TABLE 2A9 - REGULAR MILITARY COMPENSATION (RMC)
(AS OF JAN 1990)

PAY GRADE	YEARS 2	2	3	4	6	8	10	12	14	16	18	20	22	26
COMMISSIONED OFFICERS														
O-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	[illegible]
O-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	[illegible]
O-8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	[illegible]
O-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	[illegible]	[illegible]	[illegible]	0.00
O-6	0.00	0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00
O-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00
O-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00
O-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00
O-2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O-1	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W-4	0.00	0.00	0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00	0.00
W-3	0.00	0.00	0.00	0.00	0.00	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00	0.00
W-2	0.00	0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00
W-1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00
ENLISTED MEMBERS														
E-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	[illegible]	[illegible]
E-8	0.00	0.00	0.00	0.00	0.00	0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
E-7	0.00	0.00	0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
E-6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00
E-5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00	0.00
E-4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E-3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E-2	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E-1	[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(AS OF JAN 1990)

This table shows "RMC" or the approximate annual salaries of military personnel by grade and years of service. RMC is defined as the sum of basic pay, basic allowance for quarters (including any variable housing allowance), basic allowance for subsistence and an estimated tax advantage for the nontaxable allowances. These figures should not be used for economic analyses.

Data Source: "Selected Military Compensation Tables January 1990 Pay Rates," OASD (FM&P) MM&PP Directorate of Compensation

OPR: CMC(MPP), Phone (703) 614-1519, AUTOVON 224-1519

CHAPTER 2

MANPOWER

SECTION B: CIVILIAN PERSONNEL COSTS

2200. INTRODUCTION

1. This section contains data pertaining to every pay level of civilian personnel in the Marine Corps. Civilian personnel costs were developed by grade using two separate categories, one for General Schedule (GS) or classified employees and the other for Wage Rate employees.

2. The data consists of total compensation to the employee plus all of the quantifiable expenses incidental to employment. They include base pay, overtime and holiday pay, retirement cost, life insurance, health benefits, terminal leave, training, and worker’s compensation.

3. These costs are comparable with the total military manpower costs in Tables 2A1 and 2A2. They are also comparable with, though not identical to, the cost in the DoD report "Average Cost of Military and Civilian Manpower."

4. O&M support costs were excluded because specific data is not currently available.

2201. DATA USE. The primary intended use of Tables 2B1 through 2B4 is to estimate average manpower costs when actual expense data is unavailable.

Table 201 - CIVILIAN MAN-YEAR COST FOR GENERAL SCHEDULE 1/
(ESTIMATE AS OF JAN 1990)

PAY GRADE	BASE PAY/2/	OTHER PAY	LIFE INSURANCE	HEALTH BENEFITS	TERMINAL LEAVE	WORKMEN'S COMPENSATION	RETIREMENT	UNEMPLOYMENT COMPENSATION	TOTAL
GS-1	11,950	180	72	1,465	1	372	617	1,394	16,335
GS-2	12,655	196	78	1,465	1	392	653	1,476	17,450
GS-3	14,794	224	88	1,465	124	458	1,063	570	18,793
GS-4	15,517	268	95	1,465	127	480	1,123	598	21,078
GS-5	18,487	277	111	1,465	166	572	1,237	770	22,259
GS-6	20,558	309	124	1,465	173	539	1,401	750	24,559
GS-7	22,887	343	137	1,465	204	680	1,555	934	27,704
GS-8	25,251	380	152	1,465	226	554	1,724	805	29,837
GS-9	28,022	0	168	1,465	249	736	1,965	935	33,533
GS-10	30,842	0	184	1,465	276	454	2,182	47	35,451
GS-11	33,875	0	203	1,465	301	529	2,364	1,322	38,059
GS-12	40,611	0	243	1,465	361	195	2,974	1,006	47,857
GS/GM-13	48,257	0	290	1,465	430	825	3,534	1,594	56,395
GS/GM-14	57,034	0	342	1,465	508	520	3,882	1,112	65,085
GS/GM-15	67,119 2/	0	403	1,465	0	736	4,566	2,460	76,749
GS/GM-16 3/	78,193 2/	0	469	1,465	0	858	5,317	0	86,777
GS-18 1/	80,669 2/	0	537	1,465	0	885	5,475	0	91,031

(ESTIMATE AS OF JAN 1990)

1/ These costs were derived as outlined below:

a. average base pay costs for GS employees by grade were derived from the Office of Personnel Management (OPM) Schedule dated 1 October 1989 and for Wage Rate employees, from the November 1989 Department of Defense Wage Fixing Authority pay scales.

b. Overtime and holiday pay were computed at 1.5 percent of average base pay by grade.

c. Retirement cost of the Government was calculated was at 20.4 percent of average base pay, with about one third of this funded by the Marine Corps, and the rest is unfunded. An additional contribution is made by the employee.

d. Life insurance costs were computed by applying the rate of 0.6 percent to average base pay.

e. Health benefits were computed by dividing estimated FY89 health benefit contributions by FY89 U.S. direct hire civilian man-years. Costs have been escalated

to FY90.

f. Terminal leave costs were derived for GS personnel by dividing the product of total terminal leave cost and the ratio of separations in a grade to total separations by man-years in a Grade. Costs have been escalated to FY90 dollars.

g. The cost of workmen’s compensation was computed by dividing its’ total expenses to the Marine Corps in FY84 by total man-years. Costs have been escalated to FY90 dollars.

h. The cost of unemployment compensation was derived by escalating the cost in the DoD report "Average Cost of Military and Civilian Manpower." This cost was escalated to FY90 dollars.

i. O&M support costs were excluded because specific data is not currently available.

2/ Includes overtime and holiday pay. Grades higher than GS-8 were excluded because they rarely draw this pay.

3/ Currently, there are no GS/GM-16,17, or 18 personnel employed by the Marine Corps. Personnel who would normally be in those grades are presently in the Senior Executive Service at level 4 (i.e., ES-4).

4/ Limited to $78,200 by section 5380 of title 5 of the U.S. Code.

OPR: CMC (LCO), Phone (703) 696-1038, AUTOVON 226-1038

TABLE [illegible] [illegible] PER-YEAR COST FOR WAGE RATE (SUPERVISORY) PERSONNEL 1/

(ESTIMATE AS OF JAN 1990)

PAY GRADE	BASE PAY	OTHER PAY	LIFE INSURANCE	HEALTH BENEFITS	TERMINAL LEAVE	WORKER'S COMPENSATION	RETIREMENT	UNEMPLOYMENT COMPENSATION	TOTAL
WG-1	21,329	320	160	1,435	210	396	4,534	0	27,375
WG-2	25,377	380	190	1,435	251	471	5,175	0	33,779
WG-3	25,854	388	155	1,435	255	306	5,267	0	33,195
WG-4	27,415	411	164	1,435	247	315	5,584	0	35,615
WG-5	28,557	434	174	1,435	261	331	5,819	667	37,678
WG-6	30,558	458	183	1,435	275	355	6,227	220	39,707
WG-7	34,583	519	192	1,435	311	399	7,045	0	44,484
WG-8	38,946	584	234	1,435	350	337	7,933	0	49,819
WG-9	34,744	521	208	1,435	313	364	7,365	587	45,547
WG-10	36,887	553	216	1,435	332	385	7,514	172	47,064
WG-11	37,889	568	222	1,435	334	397	7,722	0	47,971
WG-12	38,336	575	230	1,435	345	399	7,807	1,250	49,767
WG-13	39,243	589	235	1,435	354	351	7,716	438	49,112
WG-14	41,854	628	251	1,435	377	395	8,527	906	53,768
WG-15	44,377	667	266	1,435	399	417	9,036	2,154	58,355
WG-16	46,246	694	277	1,435	416	365	9,465	0	58,847

(SUPERVISORY) PERSONNEL 1/ (ESTIMATE AS OF JAN 1990)

1/ These costs were derived as outlined below:

(a) Average base pay costs for GS employees by grade were derived form the Office of Personnel Management (OPM) Schedule dated 1 October 1983 and for Wage Rate employees, from the October 1983 Department of Defense Wage Fixing Authority pay scales. They have been adjusted for yearly pay raises.

(b) Overtime and holiday pay were computed at 1.5 percent of average base pay by grade.

(c) Retirement cost to the Government was calculated at 20.4 percent of average base pay, with about one-third of this funded by the Marine Corps and the rest is unfunded. An additional contribution is made by the employee (7 percent of base pay).

(d) Life insurance costs were computed by applying the rate of 0.6 percent to average base pay. The rate was derived by dividing the Marine Corps cost of regular group life insurance by total Marine Corps obligations for U.S. direct hire civilian employees in FY81.

(e) Health benefits were computed by dividing estimated FY82 health benefit contributions by FY83 U.S. direct hire civilian man-years. Costs have been escalated to FY90.

(f) Terminal leave costs were derived for GS personnel by dividing the product of total terminal leave cost and the ratio of separations in a grade to total separations by man-years in a grade. Costs have been escalated to

FY90.

(g) The cost of workmen's compensation was computed by dividing its total expenses to the Marine Corps in FY84 by total man-years. Costs have been escalated to FY90.

(h) The cost of unemployment compensation was derived by escalating the cost in the DoD report "Average Cost of Military and Civilian Manpower." Costs have been escalated to FY90.

(i) O&M support costs were excluded because specific data is not currently available. However, this amount is probably quite small.

OPR: CMC (LCO), Phone (703) 696-1038, AUTOVON 226-1038

[illegible]

PAY GRADE	BASE PAY	OTHER PAY	LIFE INSURANCE	HEALTH BENEFITS	[illegible] LEAVE	[illegible] COMPENSATION	[illegible]	UNEMPLOYMENT COMPENSATION	TOTAL
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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PERSONNEL 1/(ESTIMATE AS OF JAN 1990)

1/ These costs were derived as outlined below:

(a) Average base pay costs for GS employees by grade were derived from the Office of Personnel Management (OPM) Schedule, 1 Oct 1983, and for Wage Rate employees, from the Oct 1983 Department of Defense Wage Fixing Authority pay scales. They have been adjusted for yearly pay raises.

(b) Overtime and holiday pay were computed at 1.5 percent of average base pay by grade.

(c) Retirement cost to the Government was calculated at 20.4 percent of average base pay, with about one-third

of this funded by the Marine Corps and the rest is unfunded. An additional contribution is made by the employee (7 percent of base pay).

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(e) Health benefits were computed by dividing estimated FY82 health benefit contributions by FY83 U.S. direct civilian man-years. Costs have been escalated to FY90.

(f) Terminal leave costs were derived for GS personnel by dividing the product of total terminal leave cost and the ratio of separations in a grade to total separations by man-years in a grade. Costs have been escalated to FY90.

(g) The cost of workmen's compensation was computed by dividing its total expenses to the Marine Corps in FY84 by total man-years. Costs have been escalated to FY90.

(h) The cost of unemployment compensation was derived by escalating the cost in the DoD report "Average Cost of Military and Civilian Manpower." Costs have been escalated to FY90.

(i) O&M support costs were excluded because specific data is not currently available. However, this amount is probably quite small.

OPR: CMC (LCO), Phone (703) 696-1038, AUTOVON 226-1038

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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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(NONSUPERVISORY) PERSONNEL(1)

(ESTIMATE AS OF JAN 1990)

1/ These costs were derived as outlined below:

(a) Average base pay costs for GS employees by grade were derived from the Office of Personnel Management (OPM) Schedule, 1 Oct 1983, and for Wage Rate employees, from the Oct 1983 Department of Defense Wage Fixing Authority pay scales. They have been adjusted for yearly pay raises.

(b) Overtime and holiday pay were computed at 1.5 percent of average base pay by grade.

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(h) The cost of unemployment compensation was derived by escalating the cost in the DoD report "Average Cost of Military and Civilian Manpower." Costs have been escalated to FY90.

(i) O&M support costs were excluded because specific data is not currently available. However, this amount is probably quite small.

OPR: CMC (LCO), Phone (703) 696-1038, AUTOVON 226-1038

MARINE CORPS COST FACTORS MANUAL

CHAPTER 2

MANPOWER

SECTION C: ADVISORY SERVICE COSTS

2300. INTRODUCTION

1. Advisory service cost factors contained in this section pertain to average man-hour costs of special research projects relating to scientific/technical matters and/or management procedures. Contract Advisory and Assistance Service (CAAS) is often acquired to supplement Government agency efforts and is selected on the basis of competitive pricing and performance rating.

2. Table 2C1 provides average cost per man-hour for CAAS and Government agency research. Total costs are broken out by component; i.e., direct labor, labor overhead, general and administrative, and profit or fixed fee.

2301. DATA USE

1. Cost factors contained in this section can be used to make rough comparisons between CAAS costs and those of Government agency research. However, the figures should be used for general planning only, as the factors for CAAS are average numbers based on a wide range of salaries and indirect costs; while those for Government agencies are tied to a single representative pay level. Due to the difference in pay scales between private industry and the Government, a problem requiring upper level managerial talent would probably be more expensive than indicated by the table. Accordingly, problems requiring more than a rough cost estimate should be done with actual costs, if possible.

TABLE 201- - ADVISORY COSTS PER AVERAGE MAN-YEAR[1]
(AS OF MAR 90)

SERVICE TYPE	DIRECT LABOR[2]	LABOR OVERHEAD[3]	TOTAL DIRECT LABOR AND OVERHEAD	GENERAL AND ADMINISTRATIVE[4]	SUBTOTAL	PROFIT OR FIXED FEE[5]	GRAND TOTAL[6]
CONTRACT SUPPORT SERVICE[7]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GOVERNMENT AGENCY RESEARCH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Average hourly rates are based on updated actual costs from a sampling of 1986 and 1987 contracts, with annual adjustments made thereafter to escalate rates to FY90 dollars.

2/ For contract support service, rate is based on a review of direct labor costs in recent contracts. For Government research, rate corresponds to the full man-year cost of an average GS-13, which is representative of staff accountants, economists, statisticians and scientists performing this function.

3/ Includes cost of annual leave, sick leave, holiday pay, health insurance, life insurance, terminal leave, workmen's compensation, unemployment compensation, training, retirement, and, in the case of Government employees, O&M operations and maintenance). Average 95 percent of direct labor for contract support services and 85.5 percent for Government agency research.

4/ For contract support service, includes salaries of top management and cost of advertising, postage, general supplies, telephone, utilities, etc., averages 17 percent of the sum total of direct labor and overhead. For Government agency research, these costs are included in labor overhead.

5/ For contract support service, averages 8.5 percent of the sum total of direct and indirect costs. Profit fixed fee is not applicable to Government agency research.

6/ Costs shown do not include separately billable direct costs such as travel, reproduction, computer time, etc.

7/ Pertains to commercial scientific research and management consulting services.

Data Source: See footnote 1.

OPR: Contract Info: CG MCRDAC (LBC) Phone (703) 696-1005, AUTOVON 226-1005
Government Info: CMC (FDB I&A) Phone (703) 614-2570, AUTOVON 224-2570

MARINE CORPS COST FACTORS MANUAL

CHAPTER 2

MANPOWER

SECTION D: PERMANENT CHANGE OF STATION (PCS) TRAVEL

2400. INTRODUCTION. This section contains average PCS cost per move by type of PCS and by pay grade. PCS moves are a significant element of military personnel costs. Although many personnel policies which affect PCS must be based on noncost criteria, the planner and decisionmaker should be aware of the cost implications.

2401. DATA USE. Table 2D1 is intended to be utilized to estimate the cost of average PCS moves by type and pay grade. Cost estimates for specific PCS moves should be obtained from CMC (Code FDB).

TABLE 2D1. - AVERAGE PCS COSTS PER MOVE
(as of Feb 1990)

FY90 PCS COST PER MOVE BY TYPE MOVE

Type move[1]	Element	Cost[2]
Accession	Officer	3513
	Enlisted	[illegible]
Training	Officer	3453
	Enlisted	792
Operational	Officer	5013
	Enlisted	2434
Individual	Officer	5916
	Enlisted	2434
Separation	Officer	3372
	Enlisted	1210
Unit	Officer	5132
	Enlisted	525

FY90 MOVE COSTS PER YEAR BY PAY GRADE[3]

Average	Cost	Average	Cost
O 7/O 10	19102	E 9	5960
O-6	19498	E-8	5090
O 5	12126	E 7	5465
O-4	7777	E-6	4289
O 3	7548	E-5	3042
O 2	3543	E-4	1346
O 1	2913	E-3	432
		E 2	115
		E-1	75
W-4	6411		
W 3	5536		
W-2	7421		
W 1	1953		

1/ The definition of Permanent Change of Station (PCS) categories are as follows:

a) Accession - Travel from place of enlistment or

commissioning (or from point of receipt of orders) to first (or new) permanent duty station or training school 20 weeks or more duration. Attendance at flight training by newly commissioned officers is considered an accession move.

b) Training - Travel within CONUS to and from permanent duty station to training school of 20 weeks or more duration. Excludes accession travel.

c) Operational - Travel within CONUS and within overseas areas (when no transoceanic travel is involved) between duty stations.

d) Rotational - Travel between CONUS and overseas permanent duty station, and travel between overseas permanent duty stations when transoceanic travel is involved.

e) Separation - Travel upon separation from service, between last permanent duty station and home of record or point of entry into the service.

f) PCS movements in connection with the relocation of an organized unit.

2/ The cost of getting someone into the service (accession costs) were excluded since the table is designed for maintenance or nonaccession data computation.

3/ Nontemporary storage costs were allocated based on the number of officer and enlisted moves in each PCS category.

Data Source: FY90 MPMC President's Budget submission of January 1990

OPR: CMC (FDB-MPMC) Phone (703) 614-5524, AUTOVON 224-5524

SECTION E: MILITARY PERSONNEL ACCESSIONS

2500. INTRODUCTION. Military personnel procurement efforts are designed to satisfy officer and enlisted accession requirements. This section includes estimates of the cost

attributable to those efforts.

2501. DATA USE. Table 2E1 is used to estimate cost per accession.

TABLE 2E1. FY90 MILITARY PERSONNEL RECRUITMENT COSTS
(MARCH 1991)

ENLISTED RECORDED

COST CATEGORY	WORK YEARS	PERS COST (000)	OTHER (000)	TOTAL
Headquarters Personnel				
Officer	4	$256.0		$256.0
Enlisted	5	$126.0		$126.0
Civilian	8		$75.0	$75.0
Field Personnel				
Officer	156	$7,910.0		$7,910.0
Enlisted	166	$7,655.0		$7,655.0
Civilian	115		$2,669.0	$2,669.0
Recruiters				
Officer				
Enlisted	1527	$47,152.0		$47,152.0
Recruit Depot Staff				
Officer	8	$475.0		$475.0
Enlisted	77	$517.0		$517.0
Recruiter Schools				
Students	116	$2,747.0		$2,747.0
Instructors				
Officers	7	$113.0		$113.0
Enlisted	24	$572.0		$572.0
Basic Avia. Lateral Entrants[1]				
Enlisted	575	$16,338.0		$16,338.0
Support				
Other Support			$24,649.0	$24,649.0
Advertising			$10,096.0	$10,096.0
Investment Assets		$8,566.0		$8,566.0
Total		$101,854.0	$37,209.0	$119,155.0

OFFICER PROGRAM

Cost Category	WORK YEARS	PERS COST (000)	OTHER (000)	TOTAL
Headquarters Personnel				
Officer	8	$479.0		$479.0
Enlisted	5	$126.0		$126.0
Civilian	12		$315.0	$315.0
Field Personnel				
Civilian	50		$1,168.0	$1,168.0
Recruiters				
Officer	77	$4,550.0		$4,550.0
Enlisted	77	$1,916.0		$1,916.0
Other Support			$5,610.0	$5,610.0
Advertising			$1,780.0	$1,780.0
Total	230	$7,063.0	$8,883.0	$15,946.0

NUMBER OF ACCESSIONS (000)[3]

REGULAR Enlisted Accessions	32.1
REGULAR Officer Accessions	0.7
RESERVE Enlisted Accessions	7.8
RESERVE Officer Accessions	2.5
OFFICERS (Est. Appointed in Year Total)	1.8
TOTAL ACCESSIONS	47.0

2001 PER ENLISTED ACCESSION[4] $3,711.0
2001 PER OFFICER ACCESSION[4] $7,[illegible]

1/ Recruiter assistants are part of the Regular Enlisted Recruiting Program. The command recruiter is an Active duty Marine from various commands assigned on a temporary basis to assist the recruiter with referrals.

2/ Enlisted bonuses are paid to Regular enlistees upon qualification for a bonus MOS. See Table 2A6 for additional information.

3/ Accession is defined as anyone who executes a contract resulting in a status with the Government.

4/ Computed by dividing total cost of the enlisted program ($119,103,000) by Regular nonprior service accessions.

5/ Computed by dividing total cost of the Officer Program ($13,948,000) by the number of officer accessions.

OPR: CMC (MRFL), Phone (703) 614-5689, AUTOVON 224-5689

CHAPTER 2

MANPOWER

SECTION F: SUPPORT COSTS

2600. INTRODUCTION

1. This section contains average support costs per Marine man-year for those Marine Corps bases and air stations which support Fleet Marine Force (FMF) units in garrison.

2. Support costs are those annual recurring expenses, less reimbursables, attributable to the support provided to tenant organizations and to the support establishment itself. "Support" refers to services provided to organizations (e.g., base supply and communications) and to members thereof and their dependents (e.g., recreational and commissary facilities). Support costs considered here are funded through the Operation and Maintenance, Marine Corps (O&M,MC) appropriation. Other support costs such as military manpower, major procurement items and military construction are not considered.

2601. DATA USE. Support costs should be considered in estimating total expenses incurred by FMF units in garrison. The average annual support cost of an FMF unit in chapter 5 may

be estimated by multiplying the total number of personnel in that unit (including officers and enlisted personnel of the Navy as well as Marine Corps) by the per person amounts in Table 2F1. Since the cost of support is primarily a function of the number of military personnel supported, typical strength (vice Table of Organization (T/O)) should be used. Since these rates are for garrison situations only, application to Chapter 6 is usually not appropriate, as task-organized FMF units are normally deployed. Additionally, these rates represent average support costs and do not apply to changes in personnel strength. Such changes should be costed at the rates identified in Tables 2A1 and 2A2. The data in Table 2F1 can be used in Tables 2A1 and 2A2 instead of the Marine Corps average support cost if manpower costs for a particular base are desired.

Table 2F1. - AVERAGE SUPPORT COST PER MARINE MAN-YEAR[1]

TYPE	INSTALLATION/LOCATION[2]	CIVILIAN PERSONNEL	OTHER DOD,NC BASE OPS SUPPORT	TOTAL COMMAND	$ PER PERSONNEL
AIR STATION	CHERRY POINT, NC	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible], CA	4,638	[illegible]	[illegible]	[illegible]
	BEAUFORT, SC	2,029	[illegible]	[illegible]	[illegible]
	[illegible], HI	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible], [illegible][3]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible], [illegible]	6,887	[illegible]	[illegible]	[illegible]
AIR STATION HELICOPTER	FUTENMA, JA[4]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	668	[illegible]	[illegible]	[illegible]
	[illegible]	274	[illegible]	[illegible]	[illegible]
BASE	CAMP BUTLER, JA	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible], NC	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible], GA	[illegible]	[illegible]	[illegible]	[illegible]
	CAMP SMITH, HI[5]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible], [illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Support costs refers to services provided by an installation to its tenants and to itself. These services are classified under base operations. Only O&M costs are included here.

2/ Limited to Marine Corps installations with FMF tenants.

3/ MCAS, Kaneohe Bay hosts a Marine brigade which includes aviation units.

4/ Funding for MCAS (H), Futenma and MCB, Camp Butler is provided through the same operating budget. Therefore, the two installations are treated as a single entity.

5/ MCB Camp Smith supports Hq, FMFPac only. All combat forces are assigned to the Marine brigade supported by MCAS, Kaneohe Bay. Funding for MCB Camp Smith and MCAS Kaneohe Bay is provided through the same operating budget. Therefore the

two installations are treated as a single entity.

Data Source: FY90 Operating Budget Authorizations/Expense Report/NAVMC 10890.

OPR: CMC (FDB) PHONE (703) 614-8244, AUTOVON 224-8244

CHAPTER 3

TRAINING

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GENERAL	3000	3-3
SECTION A: TRAINING COSTS		
INTRODUCTION	3100	3-5
DATA USE	3101	3-5
SECTION B: TRAINING AMMUNITION/ORDNANCE		
INTRODUCTION	3200	3-27
DATA USE	3201	3-27

CHAPTER 3

TRAINING

3000. GENERAL

1. This chapter provides data pertaining to Marine Corps training costs. The information is divided into the following two sections:

A. Training Costs

B. Training Ammunition/Ordnance

2. Section A (Training Costs) breaks the cost of Marine Corps training down into comprehensive costs, aggregated training costs, and detailed course costs. The information is expressed in terms of cost per graduate.

3. Section B (Training Ammunition/Ordnance Costs) addresses the cost of high-usage training ammunition and ordnance for FMF organizations and weapons systems. Ammunition and ordnance account for a significant portion of the combat arms training. This section also addresses the cost of ammunition used in Marine Corps formal courses. Aviation ordnance expended by Marine aviation units is managed by the Chief of Naval Operations (CNO) with guidance published in OPNAVINST S8010.12D and the 8010 OPNAVNOTE series. Fleet commander-in-chiefs (FLT CINC's) determine annual noncombat expenditure requirements of aviation ordnance and allocate expendable ordnance to subordinate operational units. Ordnance training requirements are based on the matrices contained in the 8010 OPNAVNOTE series.

4. The data contained in each section is explained by a preface as to the particular characteristics, formulation, and use of each table. Each is annotated with footnotes, sources of data, and OPR, as appropriate.

CHAPTER 3

TRAINING

SECTION A: TRAINING COSTS

3100. INTRODUCTION. Military training costs and requirements are becoming increasingly visible and subject to close scrutiny by Congress and the Office of the Secretary of Defense (OSD). To avoid potential problems, military personnel managers should be highly knowledgeable about the resources devoted to training. The data in this section consist of the costs per graduate and per man-year for Marine Corps courses, the cost of 2 week annual training by the Selected Marine Corps Reserve (SMCR) units, and costs for courses at other service schools.

3101. DATA USE. The data in this section is intended for use as follows:

1. Table 3A1 can be used to cost specific training programs.

2. Table 3A2 is useful for estimating the cost of Reserve annual training.

3. Because a substantial number of Marines are trained by other military services, the data in Table 3A3 is included to provide a complete picture of the resources used in the formal training of Marines. Since this training is conducted on a non-reimbursable basis, these costs should be kept completely separate from training costs funded by the Marine Corps.

4. Table 3A4 shows the cost of instructors for those schools for which the Marine Corps provides instructors. It is intended to provide a more complete costing picture for training.

Table 3A1. -- COST OF MARINE CORPS COURSES PER STUDENT
(as of January 1990)

FY90 COST PER STUDENT

Course	Direct	Indirect	StuPay	Total
1	2&3	4	5	6
Officers Acquisition Training				
Officer Candidate	515	4088	7831	12434
Platoon Leaders Class-Jr.	518	2404	4606	7528
Platoon Leaders Class-Sr.	499	2356	4606	7461
Platoon Leaders Class-Combined	526	4169	7831	12526
NROTC	520	2421	5617	8558
Basic Military Training				
Recruit Training	2340	8637	3343	14320
Commissioned Officer Basic	746	12188	24012	36946
Warrant Officer Basic	370	6049	15433	21852
Marine Combat Training	603	3701	1294	5598
Professional Military Education				
SNCO Career	161	675	7295	8131
SNCO Advanced	298	1247	15769	17314
SNCO Reserve	54	226	2432	2712
SNCO Advanced Reserve	65	270	2828	3163
Amphibious Warfare	2161	7443	64431	74035
Amphibious Warfare Res Phase I	68	398	3304	3770
Amphibious Warfare Res Phase II	68	398	3304	3770
Command and Staff	3165	7097	72173	82435
Res Command and Staff Phase I & II	234	530	7772	8536

OccFld 01 Training				
Admin Officer	439	780	5714	693
Basic Typing	39	99	896	1034
Basic Typing & Pers Admin	15	26	2852	2893
Advanced Pers Admin	78	139	2633	2850
Senior Clerk	94	167	3693	3954
Ind Duty Admin	80	142	739	961
Administrative Clerk	38	66	2808	2912
Personnel Clerk	81	144	2896	3121
Unit Diary Clerk	84	149	2501	2736
Reserve Administration	46	81	739	866
Adjutant	183	325	5489	5997
OccFld 03 Training				
Infantry Officer	284	4644	8987	13915
Basic Infantry Orientation	34	4	1344	1382
Rifleman	127	62	2240	2429
Machine Gunner	440	81	2240	2761
Mortarman	376	79	2240	2695
Antitank	291	69	2550	2910
LAVcrewman	426	1287	4809	6522
Squad Leader	294	495	4226	5015
Platoon Sergeant Course	687	934	8637	10258
OccFld 11 Training				
Basic Electrician	1254	457	3716	5427
Basic Hygiene Equip Operator	438	785	7067	8290
Electrical Equipment Repairman	284	510	8670	9464
Journey Hygiene Equip Operator	1106	1325	11861	14292

Table 3A1. -- COST OF MARINE CORPS COURSES PER STUDENT
(as of January 1990)

FY90 COST PER STUDENT

Course	Direct	Indirect	StuPay	Total
1	2&3	4	5	6
Journey Electrician	944	1390	6564	8898
Utilities Officer	292	424	20991	21707
Utilities Chief	599	1047	11631	13277

Basic Refrigeration Mech	435	773	4153	5361
Journey Refrigeration Mech	242	440	6564	7246
OccFld 13 Training				
Basic Engineer Equip Mech	275	306	5756	6337
Journey Engineer Equip Mech	540	949	15316	16805
Engineer Equip Chief	592	994	9443	11029
Engineer Equipment Officer	917	1461	13358	15736
Engineer Operations Chief	298	542	6334	7174
Basic Metal Worker	966	1739	5975	8680
Journey Metal Worker	963	1749	8061	10773
Journey Engineer Equip Operator	1134	2040	12898	16072
Basic Combat Engineer	180	295	3934	4409
Journey Combat Engineer	409	731	12668	13808
Combat Engineer Officer	358	529	18701	19588
Res Combat Engineer Officer	528	537	2672	3737
Res Engr Equipment Refresher	257	472	1612	2341
Basic Landing Support Specialist	188	86	2404	2678
Basic Engineer Equip Operator	723	1102	6193	8018
Minefield Maintenance	265	434	1612	2311
Landing Support Supervisor	132	60	1727	1919
Res Basic Combat Engineer	86	108	1020	1214
Res Combat Engineer NCO	151	639	978	1768
Res Landing Support Specialist	386	130	1020	1536
OccFld 18 Training				
Assault Amphibian Crew	735	1978	3646	6359
Assault Amphibian Unit Leader	578	1555	4060	6193
Assault Amphibian Vehicle Officer	562	1512	10877	12951
Res Assault Amphibian Crewman	382	1030	1160	2572
Res AAV Unit Leader	674	1815	1612	4101
OccFld 21 Training				
Assault Amphibian Repairman	490	1318	6132	7940
Inter Assault Amphibian Repairman	550	1480	9328	11358
Elect-Optical Ordnance Repair	219	214	12760	13193
Elect-Optical Ordnance Tech	500	547	17735	18782
OccFld 25 Training				
Command and Control Systems	2271	4648	70331	77250
Basic Communications Off	2271	8375	13902	24548
Res Com Officers Phases I & II	4544	486	6608	11638
Wire Chief	660	386	8061	9107

Field Radio Operator	542	316	4557	5415
Microwave Equip Operator	423	247	3812	4482
HF Comm Central Operator	479	280	4060	4819
Radio Chief	939	548	10364	11851
Comm Center Operator	631	368	6380	7379
Comm Center Chief	770	450	8982	10202
Operational Comm Chief	1313	768	13359	15440

Table 3A1. -- COST OF MARINE CORPS COURSES PER STUDENT
(as of January 1990)

FY90 COST PER STUDENT

Course	Direct	Indirect	StuPay	Total
1	2&3	4	5	6
PLRS Master Station Operator	308	161	3685	4154
PLRS Master Station Maint	476	241	5643	6360
Res Field Radio Operator Refresher	125	72	1160	1357
Res Radio Chief Refresher	144	80	1612	1836
Res Oper Comm Chief Refresher	271	161	1612	2044
OccFld 28 Training				
Basic Electronics	1038	483	6463	7984
Technician Theory	1256	547	11516	13319
Radio Fundamentals	571	315	4474	5360
Ground Radar Fundamentals	1228	172	2320	3720
Microwave Equip Maintenance	3272	1361	24184	28817
Telephone Switchboard Rpr	1254	693	8949	10896
Teletype Repair	649	357	6629	7635
Mobile Data Comm Terminal Tech	1366	742	9860	11968
Mobile Comm Central Tech	552	302	6910	7764
Radio Technician	1393	653	12322	14368
Ground Radar Repair	2829	186	3646	6661
Ground Radar Technician	2664	426	7716	10806
Test Measurement & Diag Equip	1175	1188	21189	23552
Ground Radio Repair	1185	613	8369	10167
High Frequency Maint	177	804	1727	2708
Bancroft Full Maint	757	402	7767	8926
OccFld 30 Training				
Ground Supply Officer	160	929	15076	16165
Enlisted Supply Intermediate	146	77	8838	9061

Enlisted Supply Reorientation	106	55	3455	3616
Basic Supply Enlisted	130	437	2688	3255
Enlisted Warehouse Intermediate	113	58	4687	4858
Subsistence Supply Man	107	56	2569	2732
Res Enl Unit Supply Refresher	83	43	994	1120
Enlisted Supply Independent Duty	80	42	1369	1491
Basic Packaging/Preserve Cr	229	43	4821	5093
OccFld 33 Training				
Dining Facilities Officer Indoc	232	39	1180	1451
Basic Food Service	390	67	3201	3658
Food Service NCO	465	82	7532	8079
Food Service Management	392	68	7255	7715
Senior Food Service	361	62	5070	5493
OccFld 34 Training				
Advanced Disbursing	339	85	9673	10097
Pers Fin Records Clerk	337	85	4590	5009
Basic Travel Clerk	334	79	3716	4129
Fiscal Accounting	300	71	4590	4961
Financial Management Officer	496	127	25190	25813
OccFld 35 Training				
Motor Transport Officer	434	70	9351	9855
Organizational Auto Maint	479	75	6485	7039
Auto Intermediate Maintenance	759	122	11631	12512

TABLE 3A1. --COST OF MARINE CORPS COURSES PER STUDENT
(as of January 1990)

FY90 COST PER STUDENT

Course	Direct	Indirect	StuPay	Total
1	2&3	4	5	6
Motor Transport NCO	360	54	2837	3251
Motor Transport SNCO	499	80	8972	9551
Reserve Auto Mechanic	337	43	874	1254
Res Motor Transport Supervisor	506	57	2672	3235
Motor Vehicle Operator Course	499	548	3570	4617
SemiTrailer Refueler Operator	390	59	3340	3789

Fuel & Elec Systems Comp	1349	224	3345	4918
Vehicle Recovery	342	52	4376	4770
Logistics Vehicle Sys Operator	718	678	2332	3728
Logistics Vehicle Sup Maint	344	52	2320	2716
OccFld 40 Training				
ADA Programming	476	3100	3224	6800
ADP Orientation	233	438	2458	3129
Advanced Programming Training	260	265	2418	2943
Assembler Language Code Progr	923	1042	6564	8529
Cobol Programming	958	1368	4723	7049
Computer Operator	476	2387	2320	5183
Data Control Techniques	517	1774	5182	7473
DP Management Seminar	238	438	1612	2288
Data Systems Officer	1547	275	12778	14600
DP Management System Spec	357	2963	2418	5738
FORTRAN Programming Specialist	230	78	2458	2766
MVS Fundamentals and Logic	565	1596	10009	12170
MVS Diagnostics	263	796	2985	4044
MVS Performance and Tuning	165	461	1931	2557
Network Control Specialist	238	64	1612	1914
Small Computer Systems Spec	476	71	3224	3771
Systems Control	238	274	1160	1672
OccFld 44 Training				
Legal Services Specialist	41	98	3279	3418
Notereader/Transcriber	31	99	12130	12260
Advanced Legal Services	30	85	1160	1275
OccFld 59 Training				
Basic Electronics	1038	483	6463	7984
Radio Fundamentals	1038	483	4474	5360
Radar Fundamentals	1228	172	2320	3720
Technician Theory	1256	547	11516	13319
Aviation Radar Repair Crs (A)	1998	524	8866	11388
Aviation Radio Repair	1114	603	8120	9837
Aviation Radio Technician	474	268	4261	5003
Aviation Fire Control Rpr	5105	603	8037	13745
Aviation Fire Control Technician	3408	402	9904	13714
Aviation Radar Repair (B)	4360	402	4640	9402
Aviation Radar Repair (C)	2750	536	9115	12401
Aviation Radar Technician (A)	2108	603	11631	14342
Aviation Radar Technician (B)	4957	804	11631	17392
Aviation Radar Technician (C)	4097	804	11631	16532
Tactical Air Command Central Rpr	4429	804	9363	14596
Tactical Air Command Central Tech	4471	1206	21535	27212
Tac Air Operations Central Rpr	2977	804	12015	15796

TABLE 3A1. --COST OF MARINE CORPS COURSES PER STUDENT
(as of January 1990)

FY90 COST PER STUDENT

Course	Direct	Indirect	StuPay	Total
1	2&3	4	5	6
Tactical Data Comm Central Rpr	2509	919	11435	14863
Tactical Data Comm Central Tech	3554	1287	18426	23267
Ground Computer Technician	5534	804	26602	32940
Tactical Air Command Center Oper	1200	151	1243	2594
Microminiature Component Repair	1143	241	3480	4864
Tac Air Operations Central Tech	5410	1723	33972	41105
OccFld 72 Training				
Air Support Control Officer	3682	381	14121	18184
Air Defense Control Officer	4475	499	18129	23103
Air Control Electronics Operator	2528	254	5220	8002
Air Support Operations Operator	2666	289	3894	6849
Tactical Air Defense Comptroller	2095	219	8015	10329
OccFld 84 Training				
Recruiter	161	360	4315	4836
OccFld 85 Training				
Drill Instructor	22	580	4923	5525
Scout-Sniper	679	10169	8874	19722
Scout-Sniper Instructor	699	5332	4955	10986
Range Officer	580	18128	7364	26072
Primary Marksmanship Instructor	589	2266	1612	4467
High Risk Personnel	580	1036	925	2541
Small Arms Weapons Instructor	580	6345	7215	14140
Miscellaneous				
Instructional Management	66	226	1180	1472

Formal Schools Instructor	101	339	4484	4924
Field Medical Service Technician	26	71	2696	2793
Medical Depart Officer Orient	55	149	3304	3508
Summer Mountain Leaders Basic Crs	160	263	5049	5472
Winter Mountain Leaders Basic Crs	161	264	6579	7004
Cold Weather Medicine	156	255	2444	2855
Cold Weather Survival	161	264	2256	2681
Winter Warfare Planning (Fld Grd)*p864X	161	263	2776	3200
Mountain Survival	165	270	2256	2691
MarCor Security Forces Officer	135	375	4947	5457
CADRE Trainers	161	272	6160	6593
Basic Security Guard	129	313	2623	3065
Security Supervisor	164	311	4955	5430

1/ Includes only formal course (i.e.,training funded through FYDP Program 8).
2/ Excludes student pay and allowances, student travel, and ammunition.
3/ Allocated by student load.
4/ Support costs are allocated from base costs to training by installation mission population and reallocated to the individual course by academic student load.
5/ Student Pay obtained from CMC (FDB-MPMC) as of Jan 1990.
6/ Includes MPMC and O&MMC funds only; PMC, including ammunition, is excluded.

NOTE: Training for OccFlds not listed is provided by other Services (see Table 3A3).

OPR: CG, MCCDC (TE-33B), Phone (703) 640-3086, AUTOVON 278-3086

TABLE 3-7. [illegible] ACTIVE DUTY COSTS FOR SELECTED RESERVE UNITS[1]
[illegible]

TYPE UNIT	PAY[2] & A. Allowance	Travel[3]	MEALS & [illegible]	DSA OT	EQUIPMENT [illegible]	[illegible]	TOTAL DIRECT ATD TOTAL COSTS
GROUND							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AVIATION							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Data based on the typical 2-week ATD period for notional units at T/O strength, operating independently of other units.

2/ Based on average officer rate of $2183 and average enlisted rate of $560.

3/ Includes travel costs of reserve and active duty personnel assigned to reserve units. Travel costs of reservists ordered to active duty for training are paid from RPMC funds. The rate for officers is $363 and $358 for enlisted. Other travel is paid from O&MMCR funds.

Data Source: FY90 Marine Corps Budget Backup material dated Jan 1990.

OPR: CMC (MO-B) Phone (703) 614-1840, AUTOVON 224-1840

TABLE A-3 — COST OF TRAINING AT OTHER SERVICE SCHOOLS

COURSE TITLE	MOS SERVICE[1]	LOCATION	COST[2]
Airborne	A	Ft. Benning, GA	1,608
Ammo Tech Basic ([illegible])[3]	A	Redstone Arsenal, AL	10,776
Ammo(Mix) Specialist (EOD)	A	Redstone Arsenal, AL	3,364
Armor Crewman (M113) (EOD)	A	Ft. Knox, KY	9,077
Armor 400 Advanced[3]	A	Ft. Knox, KY	17,044
Armor Officer advanced	A	Ft. Knox, KY	16,103
Armor Officer basic	A	Ft. Knox, KY	60,645
Armor Pre Command	A	Ft. Knox, KY	22,797
Aviation Officer Advanced	A	Ft. Rucker, AL	7,369
Basic Broadcaster	A	Ft. Sam Houston, TX	18,868
Basic Journalist	A	Ft. Sam Houston, TX	8,922
Behavioral Science specialist[3]	A	Ft. Sam Houston, TX	7,727
Bridge Crewmember (MHE)	A	Ft. Sam Houston, TX	3,364
CID Special Agent (Apprentice)	A	Ft. McClellan, AL	10,837
Civil Wrk	A	Ft. Bragg, NC	27,164
Combat Surveillance Tar Acq NCO Adv	A	Ft. Sill, OK	15,251
Communications Sys/Circuit Controller	A	Ft. Gordon, GA	4,019
Construction Drafting[3]	A	Ft. Leonard Wood, MO	10,725
Construction Surveying[3]	A	Ft. Leonard Wood, MO	6,583
Correctional Counselor	A	Ft. McClellan, AL	7,223
County Intelligence Agent	A	Ft. Huachuca, AZ	5,125
Crime Prevention	A	Ft. Leavenworth, KS	23,777
Defense Advanced Training Mgt	A	Ft. Eustis, VA	11,779
Def Acq-Ir-Place Packaging	A	Aberdeen Proving Ground, MD	2,577
Def Pack of Hazardous Material for Trans	A	Aberdeen Proving Ground, MD	518
Def Inspection of Packaged Material Property	A	Aberdeen Proving Ground, MD	1,573
Def Packaging Data Systems	A	Aberdeen Proving Ground, MD	267
Def Advanced Preservation and Packing	A	Aberdeen Proving Ground, MD	555
Def Packing and Unitization	A	Aberdeen Proving Ground, MD	575
Def Packaging Instructor Training	A	Aberdeen Proving Ground, MD	1,136
Def Packing of Hazardous Mat for Trans (Air)	A	Aberdeen Proving Ground, MD	1,136
Def Preservation & Entomaddara Protection	A	Aberdeen Proving Ground, MD	666
Defense Packaging Design	A	Aberdeen Proving Ground, MD	1,795
Def Purchasing Management Insurr Trp Prep	A	Aberdeen Proving Ground, MD	1,448
DOD Strategic Fabricating	A	Ft. Belvoir, VA	3,665
Dog/Sig/Fire Weapon Crewmember	A	Ft. Benning, GA	17,354
Dog/Sig/Ft Weapon Crewmember	A	Ft. Benning, GA	21,119
Electro-Optical Systems Repair (MOS 35E) (EOD)	A	Aberdeen Proving Ground, MD	57,216
Electronic Journalism	A	Ft. Sam Houston, TX	41,161
FA Fire/Under Water Operator	A	Ft. Sill, OK	2,594
FA Meteorological Crewman	A	Ft. Sill, OK	1,961
Field Artillery Fire Controlman[3]	A	Ft. Sill, OK	12,601
Field Artillery Officer advanced[3]	A	Ft. Sill, OK	5,988
Field Artillery Officer Basic[3]	A	Ft. Sill, OK	25,953
Field Combat Equipment Repairer	A	Ft. Gordon, GA	55,252
Field Wire Equipment Repairer	A	Ft. Gordon, GA	6,115
Fuel & Elec Sys Repair (35E) (EOD)	A	Aberdeen Proving Ground, MD	2,975
Fuel Control/Fuel Nozzle Repair Spr	A	Redstone Arsenal, AL	54,215
Fuel Infor Comm Ctr Mgt (MOS [illegible])[3]	A	Ft. Bliss, TX	33,065
Fuel Piping Sect Mgt (EOD)[3]	A	Ft. Bliss, TX	46,107
Fuel Pipe Control Spr (MOS [illegible])[3]	A	Redstone Arsenal, AL	49,675
Fuel Piping Section Spr	A	Redstone Arsenal, AL	71,243
Fuel Maint Tech/Chief (MOS [illegible])	A	Redstone Arsenal, AL	53,903
Fuel Missile System Operator (MOS) (EOD)	A	Ft. Bliss, TX	7,818
Fuel Officer (EOD)	A	Ft. Bliss, TX	7,557
Fuel Pulse Acquisition Sensor Spr	A	Redstone Arsenal, AL	51,544
Individual Protective Measures (IPMAC)	A	Redstone Arsenal, AL	22,781
	A	Ft. Bragg, NC	565

TABLE 3A3 -- COST OF TRAINING AT OTHER SERVICE SCHOOLS

COURSE TITLE	MOS SERVICE[1]	LOCATION	COST[2]
Infantry Mortar Platoon	A	Ft. Benning, GA	6,592
Infantry Officer Advanced	A	Ft. Benning, GA	18,229
Installation Traffic Mgr	A	Ft. Eustis, VA	6,517
Joint Personal Property	A	Ft. Eustis, VA	5,473
Joint Tac Fmcs (TRI-TAC) Sys Opr/Sup (COA)	A	Ft. Gordon, GA	3,741
Journeyman	A	Ft. Benning, GA	1,022
LAV Review Technician	A	Aberdeen Proving Ground, MD	5,365
Light Armored Veh Rep	A	Aberdeen Proving Ground, MD	8,885
Machinist (Army) (COA)	A	Aberdeen Proving Ground, MD	15,143
Master Gunner (MA)	A	Ft. Knox, KY	29,359
Marine Artillery Operations Chief[3]	A	Ft. Sill, OK	14,585
Marine Artillery Scout Observer[3]	A	Ft. Sill, OK	17,114
MOS Prep Full Transition	A	Ft. Bragg, NC	18,138
Military Police GMOSC	A	Ft. McClellan, AL	12,133
Military Police (Investigator) (COA)	A	Ft. McClellan, AL	11,113
Military Police Officer Adv	A	Ft. McClellan, AL	24,545
MTOE/MP	A	Ft. Eustis, VA	7,740
NBC Defense (CCC)	A	Ft. McClellan, AL	5,230
Nuclear and Conv Target Anal	A	Ft. Sill, OK	3,[illegible]
Ordnance Officer	A	Aberdeen Proving Ground, MD	20,585
Petroleum Travel Special (COA)	A	Ft. Eustis, VA	2,354
Petroleum Fixed and Air Drop	A	Ft. Lee, VA	5,[illegible]
Petroleum Supply Specialist	A	Ft. Lee, VA	5,[illegible]
Postal Operations (COA)	A	Ft. Ben Harrison, IN	5,[illegible]
Postal Supervisor (COA)	A	Ft. Ben Harrison, IN	3,328
Public Affairs Officer	A	Ft. Ben Harrison, IN	7,[illegible]
Public Affairs Officer (RC)	A	Ft. Ben Harrison, IN	3,437
Public Affairs Sup	A	Ft. Ben Harrison, IN	2,446
Radiological Safety	A	Ft. McClellan, AL	1,[illegible]
Ranger	A	Ft. Benning, GA	12,137
RDT&E/Sys/IEEE Gunner/Operator (LSTD) (COA)	A	Ft. Bliss, TX	5,725
Security Manager	A	Ft. Huachuca, AZ	2,517
Self Propelled System Technician	A	Aberdeen Proving Ground, MD	15,[illegible]
Senior Dn. Public Affairs	A	Ft. Ben Harrison, IN	547
Senior Public Affairs Officer	A	Ft. Ben Harrison, IN	575
Signal Officer Advanced	A	Ft. Gordon, GA	18,510
Small Arms Repair (COA)	A	Aberdeen Proving Ground, MD	11,756
SF Military Freefall Jumpmaster	A	Ft. Bragg, NC	5,531
SF Combat Diving Supervisor	A	Ft. Bragg, NC	4,768
Special Operations Engineer Sergeant	A	Ft. Sill, OK	9,[illegible]
Special Operations Team Training (COA)	A	Ft. McClellan, AL	1,321
TAC SAT/Microwave Sys Opr	A	Ft. Gordon, GA	12,438
Tac Systems Tech (USMC) (COA)	A	Aberdeen Proving Ground, MD	21,350
Technical Control	A	Fort[illegible], [illegible]	15,[illegible]
Technical Surveillance Countermeasures	A	Ft. Benning, GA	54,[illegible]
Tele Editor	A	Ft. Ben Harrison, IN	2,[illegible]
Tracked Vehicle Repairman (STVRT)	A	Aberdeen Proving Ground, MD	5,[illegible]
Tracked Vehicle Repair (Tank)	A	Aberdeen Proving Ground, MD	3,325
Traffic Management Operations	A	Ft. Eustis, VA	3,511
TRI TAC Comms Equip Full Maintenance	A	Ft. Gordon, GA	4,[illegible]
US Army War College	A	Carlisle Barracks, PA	17,[illegible]
USMC Battery Commander (CCC)	A	Ft. Sill, OK	13,754
Vehicle Body Repairman (LMCI) (COA)	A	Aberdeen Proving Ground, MD	9,[illegible]
Veterinary Food Inspection Specialist	A	Ft. Ben Harrison, IN	3,[illegible]
AH-64 Gunnery Course	DHS[4]	Ft. Rucker, AL	4,[illegible]
Air Traffic Analysis	Lrs	Ft. Rucker, AL	15,[illegible]
Analytical Photogrammetry	PPG	Ft. Rucker, AL	1,[illegible]

TABLE 3-3 -- COST OF TRAINING AT OTHER SERVICE SCHOOLS

COURSE TITLE	FISCAL SERVICE[1]	LOCATION	COST[2]
Basic Cartography[5]	345	Ft. Belvoir, VA	[illegible]
Basic Photogrammetry[5]	345	Ft. Belvoir, VA	[illegible]
Basic Terrain Analysis	345	Ft. Belvoir, VA	[illegible]
Geodetic Surveying (Parts)[5]	345	Ft. Belvoir, VA	[illegible]
Hydrographic Survey	345	Ft. Belvoir, VA	[illegible]
Intro to Digital Mapping, Charting, Geodesy Data	345	Ft. Belvoir, VA	[illegible]
Mapping, Charting & Geodesy Officer Course(MCGO)	345	Ft. Belvoir, VA	[illegible]
Mapping, Charting & Geodesy Short Officer Course	345	Ft. Belvoir, VA	[illegible]
Offset Printing	345	Ft. Belvoir, VA	[illegible]
Supply Management Maintenance	194	Ft. Belvoir, VA	[illegible]
Air Clos Ne [illegible]	F	Lowry AFB, CO	[illegible]
Air Photo Measurement Interpretation	F	Lowry AFB, CO	[illegible]
Air Photo Production Technology	F	Lowry AFB, CO	[illegible]
Air Imagery Analysts	F	Lowry AFB, CO	[illegible]
Air Photo Measurement Interpretation	F	Lowry AFB, CO	[illegible]
Advanced Nav or Imagery Analysis	F	Lowry AFB, CO	[illegible]
Air Cargo Spec	F	Sheppard AFB, TX	[illegible]
Air Command Aircraft Voyage[3]	F	Randolph AFB, TX	[illegible]
Air Force Contracting Course	F	Newark AFB, OH	[illegible]
Air Passenger Spec	F	Sheppard AFB, TX	[illegible]
Air Service Pilot	F	Scott AFB, IL	[illegible]
Air Traffic Control	F	Newark AFB, OH	[illegible]
Airlift Operations	F	Scott AFB, IL	[illegible]
Airlift of Freedom Pilot	F	Sheppard AFB, TX	[illegible]
Aperon Analysis and Reporting	F	Goodfellow AFB, TX	[illegible]
Aerial Imagery Analyst Spec	F	Lowry AFB, CO	[illegible]
Aperon Visual Equip Maint Spec	F	Lowry AFB, CO	[illegible]
Aperon Visual Photo Prod Spec	F	Lowry AFB, CO	[illegible]
AFSSI F-15A Crash Fire Rescue Train Host	F	Chanute AFB, IL	[illegible]
Base Contract Administration	F	Lowry AFB, CO	[illegible]
Base Contract Law	F	Lowry AFB, CO	[illegible]
Base Level Printing & Local Assur	F	Lowry AFB, CO	[illegible]
[illegible]	F	Little Rock AFB, AR	[illegible]
[illegible]	F	Sheppard AFB, TX	[illegible]
Basic and Advanced Overall Maint Spec	F	Sheppard AFB, TX	[illegible]
[illegible]	F	Lowry AFB, CO	[illegible]
Contracting Spec	F	Lowry AFB, CO	[illegible]
Crypto Linguist	F	Goodfellow AFB, TX	[illegible]
Crypto Tech Interpretive (Arabic)	F	Goodfellow AFB, TX	[illegible]
Crypto Tech Interpretive (Chinese)	F	Goodfellow AFB, TX	[illegible]
Crypto Tech Interpretive (Russian)	F	Goodfellow AFB, TX	[illegible]
Crypto Tech Interpretive (Spanish)	F	Goodfellow AFB, TX	[illegible]
Current Weather Technician	F	Lowry AFB, CO	[illegible]
Detective Job Handler	F	Lackland AFB, TX	[illegible]
DoD Secret Interpretive	F	Goodfellow AFB, TX	[illegible]
Equipment Training Spec	F	Sheppard AFB, TX	[illegible]
Documentary Photo	F	Lowry AFB, CO	[illegible]
Examiner of Intercept and Interrogation	F	Hurlburt Field, FL	[illegible]
EWO Operational Crypto Analysis	F	Goodfellow AFB, TX	[illegible]
EWO(DIA) Voice Interception (Chinese)	F	Goodfellow AFB, TX	[illegible]
EWO(DIA) Voice Interception (Korean)	F	Goodfellow AFB, TX	[illegible]
Foreign Voice Interception (Russian)	F	Goodfellow AFB, TX	[illegible]
Electronic Warfare Officer[4]	F	Mather AFB, CA	27,[illegible]
Environmental Spec for Electronic Sys	F	Chanute AFB, IL	[illegible]
Graphic Specialist	F	Lowry AFB, CO	2,[illegible]
Imagery Intell Officer	F	Lowry AFB, CO	5,[illegible]
Imagery Intelligence Analyst	F	Lowry AFB, CO	5,[illegible]
Imagery Production Specialist	F	Lowry AFB, CO	5,[illegible]

TABLE 3A3 -- COST OF TRAINING AT OTHER SERVICE SCHOOLS

[illegible]	CLASS TITLE	[illegible]	LOCATION	2023[2]
[illegible]	[illegible] Promotion Technician	F	Lowry AFB, CO	5,[illegible]
[illegible]	[illegible] Military Judge Seminar	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Space Intelligence Operations	[illegible]	Peterson AFB, CO	[illegible]
[illegible]	Law Enforcement (Corrections School	[illegible]	Lackland AFB, TX	[illegible]
[illegible]	Law Enforcement [illegible]	[illegible]	Lackland AFB, TX	[illegible]
[illegible]	Law Enforcement Supv	[illegible]	Lackland AFB, TX	[illegible]
[illegible]	Local Services Advanced	[illegible]	[illegible]	[illegible]
[illegible]	Marine Aviation Ops Officer[3]	F	Marine AFB, CA	[illegible]
[illegible]	Marine Corps Weather Observer	[illegible]	Chanute AFB, IL	[illegible]
[illegible]	Marine Weather Service Chief	F	Chanute AFB, IL	[illegible]
[illegible]	Work in Transport Sys [illegible]	[illegible]	Lowry AFB, CO	[illegible]
[illegible]	Meteorological & Oceanographic Analyst/Forecaster	F	[illegible]	[illegible]
[illegible]	Meteorological Equipment Maintenance	F	Chanute AFB, IL	[illegible]
[illegible]	Military Working Dog Trainer/Supv	[illegible]	[illegible] AFB, TX	[illegible]
[illegible]	[illegible] Officer	F	Lowry AFB, CO	[illegible]
[illegible]	[illegible] Inspection Tech	[illegible]	[illegible] AFB, IL	[illegible]
[illegible]	Nuclear Weapons Tech Operation	F	Kirtland AFB, NM	[illegible]
[illegible]	Nuclear Weapon [illegible]	F	Kirtland AFB, NM	[illegible]
[illegible]	Parachute Rig Handler	[illegible]	Lackland AFB, TX	[illegible]
[illegible]	Physical Measurement and Information [illegible]	[illegible]	Lowry AFB, CO	[illegible]
[illegible]	[illegible] Radio Programming Manager	[illegible]	Lowry AFB, CO	[illegible]
[illegible]	Red Horse Air Force[3]	[illegible]	Hickam AFB, HI	[illegible]
[illegible]	Executive Officer Course	[illegible]	Lackland AFB, TX	[illegible]
[illegible]	Security Police Supervisor	[illegible]	Lackland AFB, TX	[illegible]
[illegible]	Senior Officer Nuclear Accident	[illegible]	Kirtland AFB, NM	[illegible]
[illegible]	[illegible] Officer Course to Targeting Specialist[5]	[illegible]	Lowry AFB, CO	[illegible]
[illegible]	[illegible] Physical Medicine Specialist	[illegible]	Lowry AFB, CO	[illegible]
[illegible]	Structural Fire Fighter [illegible]	[illegible]	Chanute AFB, IL	[illegible]
[illegible]	[illegible] Jet Fuel Cell Qualification	[illegible]	Dyess AFB, TX	[illegible]
[illegible]	[illegible] Space Maint	[illegible]	[illegible] AFB, [illegible]	[illegible]
[illegible]	[illegible] Repair	[illegible]	[illegible] AFB, [illegible]	[illegible]
[illegible]	Traffic Mgt and Accident Investigation	[illegible]	[illegible] AFB, CO	[illegible]
[illegible]	Tropospheric Scatter/Forecasting	[illegible]	Chanute AFB, IL	[illegible]
[illegible]	Turbocrop Production Manager	F	Chanute AFB, IL	[illegible]
[illegible]	[illegible]	[illegible]	[illegible] AFB, [illegible]	[illegible]
[illegible]	Voice Process Specialist ([illegible])	[illegible]	Goodfellow AFB, TX	[illegible]
[illegible]	Voice Process Specialist (Civilian)	F	Goodfellow AFB, TX	[illegible]
[illegible]	[illegible] Segment Maint ([illegible])	[illegible]	Lowry AFB, CO	[illegible]
[illegible]	[illegible] Segment Mgmt (Civilian)	[illegible]	Lowry AFB, CO	[illegible]
[illegible]	[illegible] Segment Supv (Civilian)	[illegible]	Goodfellow AFB, TX	[illegible]
[illegible]	Weather [illegible]	[illegible]	[illegible] AFB, IL	[illegible]
[illegible]	Weather Satellite Sys [illegible] Interpretation	[illegible]	Chanute AFB, IL	[illegible]
[illegible]	Advanced [illegible] Disbursement (CCDR)	[illegible]	[illegible], [illegible] AFB, [illegible]	[illegible]
[illegible]	Advanced Probabilistic [illegible]	[illegible]	[illegible], HAS, [illegible], [illegible]	[illegible]
[illegible]	[illegible] Installation Concepts [illegible]	[illegible]	[illegible], Fort [illegible], CA	[illegible]
[illegible]	[illegible] Miniature Component [illegible]	[illegible]	[illegible], HAS Memphis, TN	[illegible]
[illegible]	[illegible] Force Prod	[illegible]	[illegible], HAS [illegible], [illegible]	[illegible]
[illegible]	Air Traffic Controller	[illegible]	[illegible], HAS Memphis, TN	[illegible]
[illegible]	[illegible] Firefighting & Rescue Chief	[illegible]	[illegible], HAS Memphis, TN	[illegible]
[illegible]	[illegible] Equipment [illegible]	[illegible]	[illegible], HAS, Lackland, TX	[illegible]
[illegible]	[illegible] Equipment [illegible]	[illegible]	[illegible], HAS, Lackland, TX	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], San Diego, CA	[illegible]
[illegible]	[illegible] Automobile Course[3]	[illegible]	[illegible], Norfolk, VA	[illegible]
[illegible]	[illegible] Maint	[illegible]	[illegible], [illegible] AFB, TX	[illegible]
[illegible]	[illegible] Maintenance	[illegible]	[illegible], [illegible], TX	[illegible]
[illegible]	[illegible] Quarter Telegraph Terminal [illegible]	[illegible]	[illegible], Norfolk, VA	[illegible]
[illegible]	[illegible] Quarter Telegraph Terminal [illegible]	[illegible]	[illegible], Fort Monroe, VA	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], Norfolk, VA	[illegible]

TABLE 3A2 -- COST OF TRAINING AT OTHER SERVICE SCHOOLS

COURSE TITLE	[illegible]	[illegible]	[illegible]
[illegible] 22 Maintenance	M	SSC, San Diego, CA	1,561
[illegible] Satellite Comm Sys Mgmt	M	SSC, San Diego, CA	1,203
[illegible] Photo Staff College	M	USN Prof Dev Trng Group	19,005
Armed Forces Staff College [illegible]	M	USN Prof Dev Trng Group	1,[illegible]
[illegible] Equipment Analyst [illegible]	M	NATTC, NAS Memphis, TN	4,221
[illegible] Equipment Analyst [illegible]	M	NATTC, NAS Memphis, TN	4,[illegible]
[illegible]	M	NATTC, NAS Memphis, TN	3,[illegible]
Administrative Manager	4	NTTC, NAS, Pensacola, FL	1,[illegible]
Automated Telecommunications Sys Tech	4	NTTC, Pensacola, FL	8,162
Aviation [illegible] Maintenance Class A 1	4	NATTC, NAS Memphis, TN	2,[illegible]
Aviation [illegible] Maintenance [illegible]	4	NATTC, NAS Memphis, TN	8,[illegible]
Aviation Ord Maintenance Tech	4	NATTC, NAS Memphis, TN	3,[illegible]
Aviation [illegible] Personnel [illegible]	4	NATTC, NAS Memphis, TN	3,[illegible]
Aviation Structural Mechanic E [illegible]	4	NATTC, NAS Memphis, TN	2,[illegible]
Aviation Structural Mechanic E [illegible]	4	NATTC, NAS Memphis, TN	3,[illegible]
Aviation Squadron Electronic Warfare Officer	4	NTTC, Pensacola, FL	2,[illegible]
Aviation Supply Management	4	NTTC, NAS Meridian, MS	3,[illegible]
[illegible]	4	NATTC, NAS Memphis, TN	9,[illegible]
Avionics Tech Class A1	4	NATTC, NAS Memphis, TN	3,[illegible]
Avionics Tech Class A1	4	NTTC, NAS, Meridian, MS	2,[illegible]
Air [illegible] Officer	4	NAS, Pensacola, FL	3,[illegible]
Air [illegible] Class A1	4	NATTC, NAS Memphis, TN	1,[illegible]
Air Sub Equipment Tech Class CLASS A1	4	NATTC, NAS Memphis, TN	3,[illegible]
Air Sub Equipment Tech Class A1	4	NATTC, NAS Memphis, TN	3,[illegible]
Basic Electronics Tech	4	SSC, [illegible], IL	3,[illegible]
Basic Electronics Tech	4	SSC, NTC, Orlando, FL	2,891
Basic Electronics Tech [illegible]	4	SSC, NTC, San Diego, CA	3,[illegible]
[illegible]	4	NATTC, NAS Memphis, TN	1,[illegible]
Basic Helicopter H6	4	NATTC, NAS Memphis, TN	1,[illegible]
Basic Helicopter H3	4	NATTC, NAS Memphis, TN	1,[illegible]
Basic [illegible] Space [illegible]	4	[illegible], [illegible]	[illegible]
Basic MIMMS Course	4	LFTCLant, Norfolk, VA	1,[illegible]
Basic MIMMS Reserve Orientation [illegible]	4	LFTCLant, Norfolk, VA	[illegible]
Career Supply Management	4	NSCS, NAS, Athens, GA	1,[illegible]
[illegible]	4	[illegible]	4,847
Chief Petty Officer [illegible]	4	STP, [illegible], PA	[illegible]
Combat Service Support [illegible]	4	LFTCLant, Norfolk, VA	[illegible]
[illegible]	4	[illegible]	[illegible]
Computer [illegible]	4	NTTC, Pensacola, FL	2,[illegible]
Command Career Counselor	4	SSC, NTC, Norfolk, VA	1,[illegible]
[illegible]	4	[illegible], [illegible]	3,[illegible]
[illegible]	4	NTTC, Pensacola, FL	1,[illegible]
Cryptologic Tech [illegible] Intern for Naval Aviation	4	NTTC, Pensacola, FL	3,[illegible]
Cryptologic Tech I Mid Rank Type [illegible]	4	[illegible], [illegible], HI	13,[illegible]
Cryptologic [illegible] Class A	4	NTTC, Pensacola, FL	1,[illegible]
Cryptologic Staff Officer	4	NTTC, Pensacola, FL	3,[illegible]
[illegible]	4	NATTC, NAS Memphis, TN	2,[illegible]
Data Sys Tech School Course A	4	DSTS, NSC, Mare Island, Vallejo, CA	12,979
EAR R14 School	4	NATTC, NAS, Jacksonville, FL	9,700
[illegible]	4	NSCOC, Fort Ramona, CA	539
[illegible]	4	NTTC, NAS, Pensacola, FL	6,[illegible]
Embarkation [illegible]	4	LFTCLant, Norfolk, VA	345
Energy Management	4	NSTMC, Fort Ramona, CA	492
[illegible]	4	NSCOC, Fort Ramona, CA	363
Equipment Operator Diesel Course Phase II	4	CCD, Indian Head, MD	13,[illegible]
Facility Planner	4	NSCOC, Fort Ramona, CA	590
[illegible]	4	[illegible], Colorado, CO	1,[illegible]
[illegible]	4	NAS, NAD, Little Creek, VA	2,359

TABLE 3A2 COST OF TRAINING AT CIVILIAN EDUCATION SERVICES

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Intelligence Officer Refresher	[illegible]	[illegible]	[illegible], Germany, VA	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], Athens, GA	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], [illegible], [illegible]	[illegible]
Landing Force Intelligence Operations (CICO)	[illegible]	[illegible]	[illegible], Pensacola, FL	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], [illegible], VA	[illegible]
Landing Force Intel. Force Officer Adv Phase II	[illegible]	[illegible]	[illegible], Germany, VA	[illegible]
Landing Force Intel./Intelligence Spec Ser Phase I	[illegible]	[illegible]	[illegible], Germany, VA	[illegible]
Landing Force Intel./Intelligence Spec Ser Phase II	[illegible]	[illegible]	[illegible], Germany, VA	[illegible]
Landing Force [illegible] Officer [illegible]	[illegible]	[illegible]	[illegible], Norfolk, VA	[illegible]
Landing Force Logistics Officer [illegible]	[illegible]	[illegible]	[illegible], Norfolk, VA	[illegible]
Landing Force [illegible] Processing [illegible]	[illegible]	[illegible]	[illegible], Norfolk, VA	[illegible]
Landing Force Tactical Control Party [illegible]	[illegible]	[illegible]	[illegible], Norfolk, VA	[illegible]
LAN Message Processor	[illegible]	[illegible]	[illegible], San Diego, CA	[illegible]
LAN Radio Communication	[illegible]	[illegible]	[illegible], San Diego, CA	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], [illegible], CA	[illegible]
Maintenance Managers Course	[illegible]	[illegible]	[illegible], Norfolk, VA	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], Norfolk, VA	[illegible]
MAGIC IPC Computer Sys AED/XOD4 Operator	[illegible]	[illegible]	[illegible], Dunwoody, VA	[illegible]
MAGIC IPC Computer Systems Intelligence Analyst	[illegible]	[illegible]	[illegible], Dunwoody, VA	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], Dunwoody, VA	[illegible]
MAGIC Intelligence [illegible]	[illegible]	[illegible]	[illegible], Dunwoody, VA	[illegible]
MAGIC Intelligence Specialist (Intermediate)	[illegible]	[illegible]	[illegible], Dunwoody, VA	[illegible]
MAGIC Intelligence Special Duty [illegible]	[illegible]	[illegible]	[illegible], Dunwoody, VA	[illegible]
Marine Air Traffic Control Adv Tech	[illegible]	[illegible]	[illegible], [illegible] Memphis, TN	[illegible]
Marine Air Traffic Control [illegible]	[illegible]	[illegible]	[illegible], [illegible] Memphis, TN	[illegible]
Marine Air Traffic Control Navigational [illegible]	[illegible]	[illegible]	[illegible], [illegible] Memphis, TN	[illegible]
Marine Air Traffic Control [illegible]	[illegible]	[illegible]	[illegible], Pensacola, FL	[illegible]
Marine Air Traffic Control Radar Tech Class [illegible]	[illegible]	[illegible]	[illegible], [illegible] Memphis, TN	[illegible]
Marine Air Operations Division, Class A	[illegible]	[illegible]	[illegible], [illegible] Meridian, MS	[illegible]
Marine Air Supply Service Enlisted	[illegible]	[illegible]	[illegible], [illegible] Meridian, MS	[illegible]
Marine Air Supply [illegible]	[illegible]	[illegible]	[illegible], [illegible], [illegible]	[illegible]
Marine Air Weapons [illegible]	[illegible]	[illegible]	[illegible], [illegible], Lakehurst, NJ	[illegible]
Mid Grade Transp & Weapons Proc (MOS[illegible])	[illegible]	[illegible]	[illegible], [illegible], Oakland, CA	[illegible]
Military Justice Lawyer	[illegible]	[illegible]	[illegible], [illegible], [illegible]	[illegible]
Military Justice Legal Officer Non Lawyer	[illegible]	[illegible]	[illegible], San Diego, CA	[illegible]
Music [illegible]	[illegible]	[illegible]	[illegible], [illegible], Little Creek, VA	[illegible]
Music Basic	[illegible]	[illegible]	[illegible], [illegible], Little Creek, VA	[illegible]
NAVMES V 2 Maint (AN/SSQ 7)	[illegible]	[illegible]	[illegible], San Diego, CA	[illegible]
Navy Airrewmen Candidate	[illegible]	[illegible]	[illegible], [illegible], FL	[illegible]
Navy/Marine Electronic Warfare Officer	[illegible]	[illegible]	[illegible], Pensacola, FL	[illegible]
Navy [illegible] Data Processing [illegible]	[illegible]	[illegible]	[illegible], San Diego, CA	[illegible]
Navy Message Ser A	[illegible]	[illegible]	[illegible], Abrams, CA	[illegible]
Non Force Basic Cos	[illegible]	[illegible]	[illegible], Pensacola, FL	[illegible]
Ocean Drone [illegible]	[illegible]	[illegible]	[illegible], [illegible], Oakland, CA	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], [illegible], Oakland, CA	[illegible]
Photographic Equip Preventive/Operational Maint	[illegible]	[illegible]	[illegible], [illegible] Pensacola, FL	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], [illegible], Oakland, CA	[illegible]
Principles of Terrorism Intelligence	[illegible]	[illegible]	[illegible], [illegible] Bliss, TX	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], [illegible], [illegible], CA	[illegible]
[illegible]	[illegible]	[illegible]	[illegible], [illegible] Pensacola, FL	[illegible]
Pub. Estate Seminar	[illegible]	[illegible]	[illegible], [illegible] Alameda, CA	[illegible]
Recruiting Program Specialist	[illegible]	[illegible]	[illegible], [illegible], [illegible], MS	[illegible]
Rescue Swim School	[illegible]	[illegible]	[illegible], Pensacola, FL	[illegible]
SCI Administrative & Physical Security	[illegible]	[illegible]	[illegible], Dunwoody, VA	[illegible]

CHART 3A3 -- COST OF TRAINING AT DODDS SERVICE SCHOOLS

COURSE TITLE	[illegible] STRUCT[1]	LOCATION	COST[2]
[illegible]	[illegible]	[illegible]	[illegible]
Scuba Diver	[illegible]	[illegible]	[illegible]
Scuba Diver	[illegible]	[illegible], CA	[illegible]
Scuba Diver	[illegible]	[illegible], FL	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible], FL	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], FL	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], FL	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], CA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], VA	[illegible]
[illegible]	[illegible]	[illegible], FL	[illegible]

1/ A=Army; DMS = Defense Mapping School; F = Air Force; N + Navy

2/ Except for pay and allowances of Marine Instructors, none of these costs are borne by the Marine Corps. These costs exclude the following: Student Pay and Allowances, Students PCS, Student TAD, and Marine Corps administrative Detachments. These include a pro rata share of base operations support, training overhead,and other indirect costs. Because each military service's training cost model is different, these costs are not comparable. The cost are in FY89 dollars.

3/ FY90 Army course costs were not available at the time of this revision, so costs were escalated from FY88 to FY89 dollars. For FY90 costs, escalate the current costs.

4/ DMS does not cost its courses on a per graduate basis. DMS prepares course costs only for input into the Military Articles and Services List (MASL). The DMS cost data in this table are the cost per Foreign Military Sales (FMS) student excluding charges for the information program, food service costs, and costs for shipping retainable instruction materials not applicable to U.S. military students.

5/ These courses are funded from the host military services appropriations. The training is provided on a reimbursable basis.

DATA SOURCES: USN - CHIEF OF NAVAL EDUCATION AND TRAINING (CNET N62);

USA - TRAINING AND DOCTRINE COMMAND (TRADOC ATRN-RA);
USA - HEADQUARTERS, AIR TRAINING COMMAND (HQ ATC, ACMS);
DMS - DEFENSE MAPPING SCHOOL (OBS)

OPR: CG, MCCDC (TE-33B), Phone (703) 640-3086, AUTOVON 278-3086

[illegible]

TABLE [illegible] - COST OF INSTRUCTORS AT MARINE CORPS [illegible]

[illegible][1]	[illegible][12]	[illegible][2] [illegible]	[illegible][3] [illegible]	[illegible][4] GRAD	[illegible][5] [illegible]	[illegible][6] [illegible] OFF	[illegible][8] [illegible] OFF	[illegible][7] [illegible] ENL	[illegible][9] [illegible] ENL	[illegible][9] TOTAL [illegible] COST	[illegible][10] COST [illegible] STUDENT
	The Basic School										
[illegible]	[illegible] OFFICER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	OFFICER BASIC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] OFFICER [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Staff NCO Academy										
[illegible]	STAFF NCO CAREER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Command and Staff College										
[illegible]	[illegible] COMMAND AND STAFF COLLEGE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] COMMAND AND STAFF COLLEGE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible] [illegible] STAFF [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Amphibious Warfare School										
[illegible]	AMPHIBIOUS WARFARE BENCHMARK PHASE I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AMPHIBIOUS WARFARE BENCHMARK PHASE II	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AMPHIBIOUS WARFARE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Weapons Training Battalion										
[illegible]	SCOUT SNIPER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SCOUT SNIPER INSTRUCTOR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] OFFICER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] BOOK [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SMALL ARMS SUPPORT INSTRUCTOR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]										
	Financial Management School										
[illegible]	[illegible] TRAVEL CLERK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible] [illegible] CLERK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	FISCAL ACCOUNTING	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	FINANCIAL MANAGEMENT OFFICER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Supply School										
[illegible]	[illegible] SUPPLY [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] SUPPLY BASIC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] SUPPLY [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] SUPPLY [illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE [illegible] - COST OF INSTRUCTORS AT MARINE CORPS SCHOOLS

[illegible][11]	[illegible][12]	[illegible][1] [illegible]	[illegible][2] [illegible]	[illegible][3] GRAD	[illegible][4] LEAD	[illegible][5] [illegible] OFF	[illegible][6] [illegible] OFF	[illegible][7] [illegible] OFF	[illegible][8] [illegible] ENL	[illegible][9] MIL [illegible]	[illegible][10] PER STUDENT
	Engineer School										
[illegible]	BASIC [illegible] OPERATOR	53	286	286	251	1.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	BASIC ELECTRICIAN	51	108	100	105	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	BASIC [illegible]	57	65	65	65	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	BASIC COMBAT ENGINEER	54	956	871	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	BASIC PETROLEUMMAN	52	114	104	109	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	BASIC [illegible]	35	349	337	345	1.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ENGINEER EQUIPMENT OPERATOR	85	471	451	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	54	256	249	238	1.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COMBAT ENGINEER OFFICER	57	67	58	65	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] OFFICER	104	9	9	9	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] OFFICER	64	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RESERVE BASIC COMBAT ENGINEER	14	42	45	45	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RESERVE LANDING SUPPORT SPECIALIST	14	27	27	27	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ELECTRICAL EQUIPMENT REPAIRMAN	112	286	287	246	1.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] CHIEF	101	53	53	53	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AQUAMAN ELECTRICIAN	57	10	10	12	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AQUAMAN REFRIGERATION MECHANIC	57	15	15	15	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	62	16	17	18	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RESERVE COMBAT ENGINEER [illegible]	10	8	8	8	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	116	92	79	67	0.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AQUAMAN METALSMITH	70	16	7	17	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AQUAMAN ENGINEER EQUIPMENT MECH	116	[illegible]	[illegible]	55	0.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AQUAMAN ENGINEER EQUIPMENT OPER	105	30	30	32	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AIRCRAFT MAINTENANCE	16	17	17	17	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	10	14	[illegible]	15	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RESERVE COMBAT ENGINEER OFFICER REPRESENT	14	11	[illegible]	11	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	15	11	15	15	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AQUAMAN [illegible] OPERATOR OFFICER	104	52	52	52	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Field Medical School										
[illegible]	FIELD MEDICAL SERVICE TECHNICIAN	57	[illegible]	[illegible]	768	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	7	216	216	216	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MEDICAL DEPARTMENT OFFICER ORIENTATION	11	28	28	28	0.0	[illegible]	0.0	[illegible]	[illegible]	[illegible]
	School of Infantry										
[illegible]	[illegible]	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MACHINE GUNNER	53	[illegible]	[illegible]	577	1.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	30	535	[illegible]	[illegible]	1.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	30	[illegible]	[illegible]	[illegible]	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	53	[illegible]	[illegible]	[illegible]	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	12			0	0.0	[illegible]	0.0	[illegible]	[illegible]	[illegible]

TABLE 3-[illegible]. [illegible] OF INSTRUCTORS AT MARINE CORPS SCHOOLS

CID[11]	COMPANY/SCHOOL[12]	[illegible][2] CAPACITY	[illegible][2]	MIL[3] GRAD	MAX[4] LOAD	MIL[5] [illegible]	MIL[6] [illegible]	CIV[7] [illegible]	MIL[8] [illegible]	TOTAL[9] [illegible] COST	COST[10] PER STUDENT
MU[illegible]	PLATOON SERGEANT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$106,[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
MU[illegible]	SQUAD LEADERS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$106,[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
	Staff NCO Academy										
[illegible]	STAFF NCO [illegible] CAREER	[illegible]	245	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
	Food Services School										
[illegible]	BASIC FOOD [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	32.[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	5	15	15	15	0.1	$[illegible]	0.[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	FOOD SERVICE NCO	[illegible]	[illegible]	[illegible]	[illegible]	0.[illegible]	$[illegible]	3.6	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	21	20	[illegible]	0.[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	SENIOR FOOD SERVICE	[illegible]	[illegible]	[illegible]	15	0.1	$[illegible]	0.8	$[illegible]	$[illegible]	$[illegible]
	Motor Transport School										
[illegible]	AUTOMOTIVE ORGANIZATIONAL [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	MOTOR VEH [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] ELECTRICAL SYSTEMS CONT [illegible]	[illegible]	20	20	[illegible]	0.[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	MOTOR TRANSPORT [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	AUTOMOTIVE INTERMEDIATE MAINTENANCE	[illegible]	125	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]	$[illegible]	17.[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] VEHICLE SYSTEM OPERATOR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] VEHICLES OPERATOR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	VEHICLE RECOVERY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	15.[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] OPERATIONS NCO	[illegible]	[illegible]	[illegible]	[illegible]	0.2	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] MOTOR TRANSPORT SUPERVISOR	[illegible]	10	10	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] MECHANIC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	LOGISTICS VEHICLE SYSTEM [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	12.[illegible]	$[illegible]	$[illegible]	$[illegible]
	Personnel Admin School										
[illegible]	PERSONNEL OFFICER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] CLERK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	UNIT DIARY CLERK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] CLERK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	BASIC TYPING	[illegible]	[illegible]	1042	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	ADJUTANT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	RESERVE ADMINISTRATION	[illegible]	[illegible]	[illegible]	[illegible]	0.[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] CLERK	[illegible]	[illegible]	[illegible]	[illegible]	0.[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] PERSONNEL ADMINISTRATION	[illegible]	[illegible]	[illegible]	[illegible]	0.[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	INDEPENDENT DUTY ADMINISTRATION	[illegible]	[illegible]	[illegible]	[illegible]	0.[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
	Miscellaneous, [illegible]										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	$[illegible]	$[illegible]	$[illegible]

TABLE 3A-[illegible] COST OF INSTRUCTORS AT [illegible] SCHOOLS

CIC[11]	COMMAND/SCHOOL[12]	[illegible][1] CLASS/INPUT	[illegible][2]	NO.[3] GRAD	AVG[4] [illegible]	MIL[5] INST OFF	[illegible][6]	MIL[7] INST ENL	[illegible][8]	TOTAL[9] MIL COST	COST[10] PER STUDENT
	[illegible]										
	Drill Instructor [illegible]										
[illegible]	DRILL INSTRUCTOR	[illegible]	[illegible]	201	[illegible]	[illegible]	[illegible]	[illegible]	$1,[illegible]	$1,[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	1	1	1	[illegible]	[illegible]	0.2	$[illegible]	$[illegible]	$[illegible]
	Recruit Training [illegible]										
[illegible]	[illegible]	57	[illegible]	[illegible]	[illegible]	0	$0	[illegible]	$1,[illegible]	$1,[illegible]	$[illegible]
[illegible]	RECRUIT TRAINING [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	$0	[illegible]	$[illegible]	$[illegible]	$[illegible]
	[illegible] School										
[illegible]	[illegible] BASIC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
	[illegible]										
	[illegible]										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	ELECTRO OPTICAL [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$0	$0	$0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0		[illegible]	$[illegible]	$[illegible]	$[illegible]
	[illegible]										
	[illegible] School										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
	[illegible] School										
[illegible]	[illegible] INSTRUCTOR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
	[illegible] School										
[illegible]	[illegible] BASIC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
	Recruit Training [illegible]										
[illegible]	RECRUIT TRAINING [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	$0	[illegible]	$[illegible]	$[illegible]	$[illegible]
	[illegible]										
	Communications-Electronics School										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	COMMUNICATIONS CENTER OPERATOR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	GROUND [illegible] REPAIR [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	GROUND [illegible] REPAIR [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]

[illegible]. COST OF INSTRUCTORS AT [illegible] SCHOOLS

CIN[11]	COURSE/SCHOOL[12]	[illegible][1] (DAYS)	[illegible][2]	NO.[3]	AVG[4]	[illegible][5]	MIL[6]	[illegible][7]	[illegible][8]	[illegible][9]	[illegible][10] STUDENT
[illegible]	[illegible] FUNDAMENTALS [illegible]	55	510	336	565	[illegible]	$150,155	32.5	[illegible]	$957,980	$2,864
[illegible]	[illegible]	[illegible]	175	126	126	5.4	[illegible]	[illegible]	$265,[illegible]	[illegible]	$2,000
[illegible]	MOBILE COMMUNICATION [illegible]	[illegible]	[illegible]	[illegible]	7	[illegible]	$[illegible],725	2.6	$[illegible],073	$42,[illegible]	$[illegible]
[illegible]	[illegible] REPAIR [illegible]	[illegible]	75	75	75	[illegible]	$27,[illegible]	15.3	[illegible]	[illegible]	$[illegible],899
[illegible]	TAC DATA COMM CENTRAL [illegible]	158	16	[illegible]	[illegible]	[illegible]	$[illegible],185	[illegible]	$[illegible]	[illegible]	[illegible]
[illegible]	[illegible] RADIO OPERATOR [illegible]	[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible],782	1.2	[illegible]	[illegible]	$1,[illegible]
[illegible]	AVIATION [illegible]	[illegible]	[illegible]	29	43	[illegible]	$2[illegible]	[illegible]	$[illegible],635	[illegible]	$2,[illegible]
[illegible]	AVIATION FIRE CONTROL [illegible]	77	21	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	[illegible]	$126,[illegible]	$[illegible]
[illegible]	AVIATION [illegible]	56	22	20	21	[illegible]	$7,096	4.8	$[illegible]	[illegible]	$[illegible]
[illegible]	AVIATION [illegible]	170	[illegible]	[illegible]	[illegible]	0.1	[illegible]	[illegible]	$[illegible]	[illegible]	[illegible]
[illegible]	[illegible] OPERATIONS [illegible]	47	41	[illegible]	[illegible]	[illegible]	$135,[illegible]	4.1	[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] OPERATOR	[illegible]	[illegible]	55	55	[illegible]	[illegible]	3.5	[illegible],751	[illegible]	$[illegible]
[illegible]	[illegible] DEFENSE CONTROL [illegible]	55	[illegible]	[illegible]	[illegible]	[illegible]	$165,[illegible]	[illegible]	[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible] COMM CENTRAL [illegible]	[illegible]	21	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$70,[illegible]	$4,[illegible]
[illegible]	[illegible] COMM [illegible] TECH	[illegible]	[illegible]	7	2	0.0	[illegible]	2.3	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] EQUIPMENT [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	210	43	20	30	3.8	[illegible]	9.9	[illegible]	[illegible]	[illegible]
[illegible]	AVIATION [illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	5.9	$[illegible]	[illegible]	$[illegible]
[illegible]	[illegible] OPERATIONS CENTER [illegible]	[illegible]	22	[illegible]	[illegible]	[illegible]	$29,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TAC [illegible] CENTRAL [illegible]	[illegible]	[illegible]	9	9	[illegible]	$7,[illegible]	12.9	[illegible]	[illegible]	$26,[illegible]
[illegible]	AIR SUPPORT CONTROL [illegible]	74	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$129,[illegible]	[illegible]	[illegible]
[illegible]	[illegible] COMM CENTRAL TECH	[illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$10,[illegible]
[illegible]	COMMUNICATIONS [illegible]	[illegible]	[illegible]	9	[illegible]	[illegible]	[illegible]	1.5	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible] COMMUNICATIONS [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$3,959
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] TECHNICIAN [illegible]	67	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$57,[illegible]	[illegible]
[illegible]	RADIO TECHNICIAN [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.2	[illegible]	17.5	[illegible]	[illegible]	$5,132
[illegible]	[illegible] CONTROL [illegible]	86	6	[illegible]	[illegible]	0.0	$2,385	1.0	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] TECHNICIAN [illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.5	[illegible]	[illegible]	[illegible]
[illegible]	AVIATION [illegible] TECHNICIAN [illegible]	286	[illegible]	[illegible]	13	0.6	[illegible]	[illegible]	$172,[illegible]	[illegible]	[illegible]
[illegible]	[illegible] CENTER [illegible]	15	0	[illegible]	[illegible]	[illegible]	[illegible]	1.3	[illegible]	$81,[illegible]	[illegible]
[illegible]	[illegible] DEFENSE CONTROL [illegible]	18	0	[illegible]	[illegible]	[illegible]	[illegible]	0.4	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] STATION OPERATOR	32	79	[illegible]	[illegible]	[illegible]	$7,956	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] MAINTENANCE [illegible]	[illegible]	[illegible]	5	6	[illegible]	[illegible]	0.1	[illegible]	$5,020	$915
[illegible]	[illegible] MAINTENANCE [illegible]	54	[illegible]	[illegible]	[illegible]	[illegible]	$2,285	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] MAINTENANCE	[illegible]	7	6	[illegible]	[illegible]	[illegible]	2.3	[illegible]	[illegible]	$5,200
[illegible]	[illegible] REPAIR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$155,[illegible]	[illegible]	[illegible]
[illegible]	[illegible] AIR DEFENSE CONTROLLER	12	15	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TAC AIR [illegible] CENTRAL [illegible]	[illegible]	[illegible]	6	9	[illegible]	[illegible]	3.6	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] CENTRAL [illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]	$0	[illegible]	$0
[illegible]	[illegible] COMM CHIEF [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	21	23	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$2,[illegible]
[illegible]	[illegible] THEORY [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$339,[illegible]	[illegible]	[illegible]
[illegible]	[illegible] TECHNICIAN		6	6	6	[illegible]	$[illegible]	[illegible]	$129,[illegible]	[illegible]	[illegible]

[illegible] COSTS OF [illegible] AT MARINE CORPS SCHOOLS

UIC[11]	COURSE/SCHOOL[12]	LEN[1] (DAYS)	INPUT[2]	GRAD[3]	AVG[4] LOAD	MIL[5] (MY)	MIL[6] [illegible]	CIV[7] [illegible]	MIL[8] [illegible]	TOTAL[9] [illegible]	COST[10] PER [illegible]
[illegible]	FLSS SUPPORT [illegible] COURSE		14	14	14	1.0	[illegible]	2.7	$37,415	$76,200	[illegible]
	[illegible]										
	Personnel Admin School										
[illegible]	PERSONNEL CLERK	57	241	232	[illegible]	[illegible]	[illegible]	7.9	$27,466	[illegible]	[illegible]
[illegible]	UNIT DIARY CLERK	56	197	192	162	3.1	$97,722	2.3	$57,625	[illegible]	[illegible]
[illegible]	ADMINISTRATIVE CLERK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	LEGAL SERVICES SPECIALIST	75	135	127	126	3.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	14	1356	1122	[illegible]	[illegible]	[illegible]	[illegible]	$339,618	[illegible]	[illegible]
[illegible]	BASIC TYPING AND LEGAL [illegible]	14	1	[illegible]	1		[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0		[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	ADVANCED LEGAL SERVICES	14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]										
[illegible]	RIFLEMAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$5,702
[illegible]	BASIC INFANTRY ORIENTATION	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	PLATOON SERGEANT	[illegible]	156	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	51	[illegible]	[illegible]	[illegible]	2.2	[illegible]	[illegible]	$422,072	[illegible]	[illegible]
	Assault Amphibian School										
[illegible]	ASSAULT AMPHIBIAN VEHICLE OFFICER	[illegible]	[illegible]	[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ASSAULT AMPHIBIAN [illegible] BASIC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RESERVE ASSAULT AMPHIBIAN CREWMAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	7	7	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ASSAULT AMPHIBIAN UNIT LEADER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] ASSAULT AMPHIBIAN REPAIR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible] School										
[illegible]	[illegible] VEHICLE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	LOGISTICS VEHICLE SYSTEM OPERATOR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Mountain Warfare Training Center										
[illegible]	[illegible]	10	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COLD WEATHER SURVIVAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SUMMER MOUNTAIN LEADERS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 3A5. COST OF INSTRUCTION AT MARINE CORPS SCHOOLS

CIN[11]	COMMAND/SCHOOL[12]	LEN[1] CONV/DAYS	NO.[2] INPUT	NO.[3] GRAD	AVG[4] LOAD	MIL[5] (MY) STF	MIL[6] (S) O&M	MIL[7] (MY) INS	MIL[8] (S) PAY	TOTAL[9] MIL COST	COST[10] PER STUDENT
[illegible]	[illegible]	25	96	73	73	0.2	$10,[illegible]	0.0	$57,543	$67,392	$772
	Field Med School										
[illegible]	FIELD MEDICAL SERVICE TECHNICIAN	57	1240	1244	1231	4.4	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	NAVAL ORIENTATION	5	250	253	125	0.6	$45,517	4.5	$113,136	$164,156	$716
[illegible]	MEDICAL DEPARTMENT OFFICER ORIENTATION	14	45	43	43	0.1	$7,803	1.6	$22,427	$26,250	$604
	Landing Force Training Command, Atlantic										
[illegible]	BASIC EMBARKATION SPECIALIST	21	125	98	117	1.1	$64,457	2.1	$52,441	$116,898	$1,097
[illegible]	BASIC NIPPS	19	182	175	184	1.7	$97,515	3.2	$80,459	$175,975	$976
[illegible]	LANDING FORCE LOGISTICS OFFICER	22	79	77	77	0.6	$34,379	1.3	$33,715	$67,291	$162
[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	1.2	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	12	[illegible]	[illegible]	14	0.2	$12,414	0.4	$10,255	$22,655	$1,598
[illegible]	[illegible]	16	42	42	27	0.4	$21,352	0.7	$17,480	$38,752	$1,048
[illegible]	[illegible]	16	42	31	32	0.4	$21,352	0.7	$17,480	$34,752	$1,[illegible]
[illegible]	EMBARKATION OFFICER/CHIEF	56	75	75	75	0.7	$38,[illegible]	1.3	$31,[illegible]	$69,843	$957
[illegible]	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	26	27	27	25	0.9	$50,880	1.8	$44,620	$95,557	$2,[illegible]
[illegible]	MAINTENANCE MANAGERS	26	137	137	137	0.9	$55,976	1.6	$44,919	$99,223	$737
[illegible]	TACTICAL AIR CONTROL PARTY	19	55	57	57	1.7	$[illegible]	3.2	$82,979	$179,[illegible]	$1,[illegible]
[illegible]	[illegible]	56	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	1.1	$[illegible]	$[illegible]	$[illegible]
[illegible]	LANDING FORCE FIRE SUPPORT COORD	12	48	48	25	0.2	$12,414	0.4	$10,255	$22,155	$555
[illegible]	MAINTENANCE MANAGERS (RESERVE) UNIT	12	25	25	25	0.1	$5,876	0.3	$5,302	$15,258	$[illegible]
[illegible]	[illegible]	17	17	17	17	0.2	$17,530	0.6	$15,772	$32,[illegible]	$2,077
[illegible]	[illegible]	12	[illegible]	19	16	[illegible]	$[illegible]	0.6	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	5	34	19	25	1.5	$[illegible]	2.9	$[illegible]	$163,869	$4,312
	Landing Force Training Command, Pacific										
[illegible]	BASIC LOGISTICS/EMBARKATION SPECIALIST	21	62	77	81	0.5	$28,487	1.0	$24,972	$53,259	$670
[illegible]	[illegible]	11	19	19	19	0.1	$5,700	0.2	$5,722	$12,246	$[illegible]
[illegible]	WATER SAFETY/SURVIVAL INSTRUCTOR	27	100	95	82	0.6	$34,379	1.2	$33,[illegible]	$65,[illegible]	$717
[illegible]	[illegible]	11	[illegible]	75	57	0.3	$[illegible]	0.7	$15,[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	18	16	14	18	0.1	$5,505	0.2	$5,496	$11,297	$666
[illegible]	AVIATION COMBAT ELEMENT STAFF PLANNING	13	25	25	25	0.2	$12,414	0.4	$10,756	$23,152	$[illegible]
[illegible]	LANDING FORCE STAFF PLANNING [illegible]	13	70	70	33	0.4	$[illegible]	0.9	$[illegible]	$45,[illegible]	$629
[illegible]	[illegible]	18	26	30	33	0.2	$10,641	0.4	$9,240	$19,881	$663
[illegible]	[illegible]	17	27	24	24	0.2	$10,[illegible]	0.4	$9,[illegible]	$16,730	$[illegible]
[illegible]	SCOUT SNIPER	16	21	25	25	0.2	$10,641	0.4	$7,[illegible]	$27,790	$719
[illegible]	[illegible]	11	21	22	25	[illegible]	$[illegible]	0.2	$5,[illegible]	$15,[illegible]	$[illegible]
[illegible]	[illegible]	25	102	66	34	0.6	$35,275	1.2	$31,213	$66,[illegible]	$707
[illegible]	TACTICAL AIR CONTROL PARTY	23	104	102	104	[illegible]	$36,[illegible]	1.2	$31,716	$68,[illegible]	$[illegible]
[illegible]	AMPHIBIOUS RECONNAISSANCE	55	171	176	159	1.3	$59,707	2.1	$52,191	$111,799	$706
[illegible]	[illegible]	11	15	15	15	[illegible]	$5,[illegible]	0.2	$[illegible]	$[illegible]	$[illegible]

TABLE 3A5. COST OF INSTRUCTION AT MARINE CORPS SCHOOLS (cont)

CIN[11]	COMMAND/SCHOOL[12]	LEN[1] CONV/DAYS	NO.[2] INPUT	NO.[3] GRAD	AVG[4] LOAD	MIL[5] (MY) OFF	MIL[6] (S) OFF	MIL[7] (MY) EN.	MIL[8] (S) ENL	TOTAL[9] MIL COST	COST[10] PER STUDENT
	[illegible]										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	[illegible]	70	15	15	15	[illegible]	[illegible]	[illegible]	$[illegible]	$[illegible]	$5,320
[illegible]	[illegible]	[illegible]	592	525	565	[illegible]	[illegible]	25.0	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]	$5,912	3.9	$20,477	$26,380	$[illegible]
	Marine Corps Security Forces, Atlantic										
[illegible]	[illegible]	14	5	2	1	[illegible]	$5,533	[illegible]	$19,[illegible]	$25,[illegible]	$[illegible]
[illegible]	[illegible]	15	45	43	45	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	56	55	55	57	[illegible]	$12,[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	BASIC SECURITY GUARD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$1,[illegible]	$1,252,[illegible]	$1,[illegible]
[illegible]	[illegible]	55	154	153	153	0.6	$[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
	Marine Corps Security Forces, Pacific										
[illegible]	[illegible]	15	15	15	15	0.1	$5,[illegible]	[illegible]	$[illegible]	$[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	15	15	15	0.1	$7,[illegible]	[illegible]	$[illegible]	$17,[illegible]	$1,[illegible]
[illegible]	BASIC SECURITY GUARD	56	862	[illegible]	605	[illegible]	$[illegible]	[illegible]	$[illegible]	$1,[illegible]	$1,[illegible]
[illegible]	[illegible]	57	227	215	220	[illegible]	$[illegible]	[illegible]	$[illegible]	$[illegible]	$1,[illegible]

1/ Length of school in days.

2/ Number of students scheduled to attend per year.

3/ Number of students expected to graduate based on attrition rates.

4/ Average number of students per course (captures training time for attrition).

5/ Military manyears required to teach the class (officer).

6/ Cost of officer instructors (FY90 composite rate x number of Military manyears (Off) required to teach the class).

7/ Military manyears required to teach the class (enlisted).

8/ Cost of enlisted instructors (FY90 composite rate x number of Military manyears (Enl) required to teach the class).

9/ Total cost of military instructors (officer and enlisted).

10/ Total cost of military instructors (officer and enlisted) divided by the average number of students.

11/ Course identification Code

12/ This column contains the Commands, the Schools located at the Command, and the individual courses which make up each school.

OPR: CG, MCCDC (TE-338), PHONE (703 640-3086, AUTOVON 278-3086

CHAPTER 3

TRAINING

SECTION B: TRAINING AMMUNITION/ORDNANCE

3200. INTRODUCTION. The tables in this section provide cost data concerning high-usage training ammunition and ordnance. The data is broken down by organization and weapon system.

3201. DATA USAGE. The information in this section can be used in the computation of training costs for the FMF and Marine Corps formal courses. In addition, it can be employed as a

tool for encouraging cost consciousness and conservation of material.

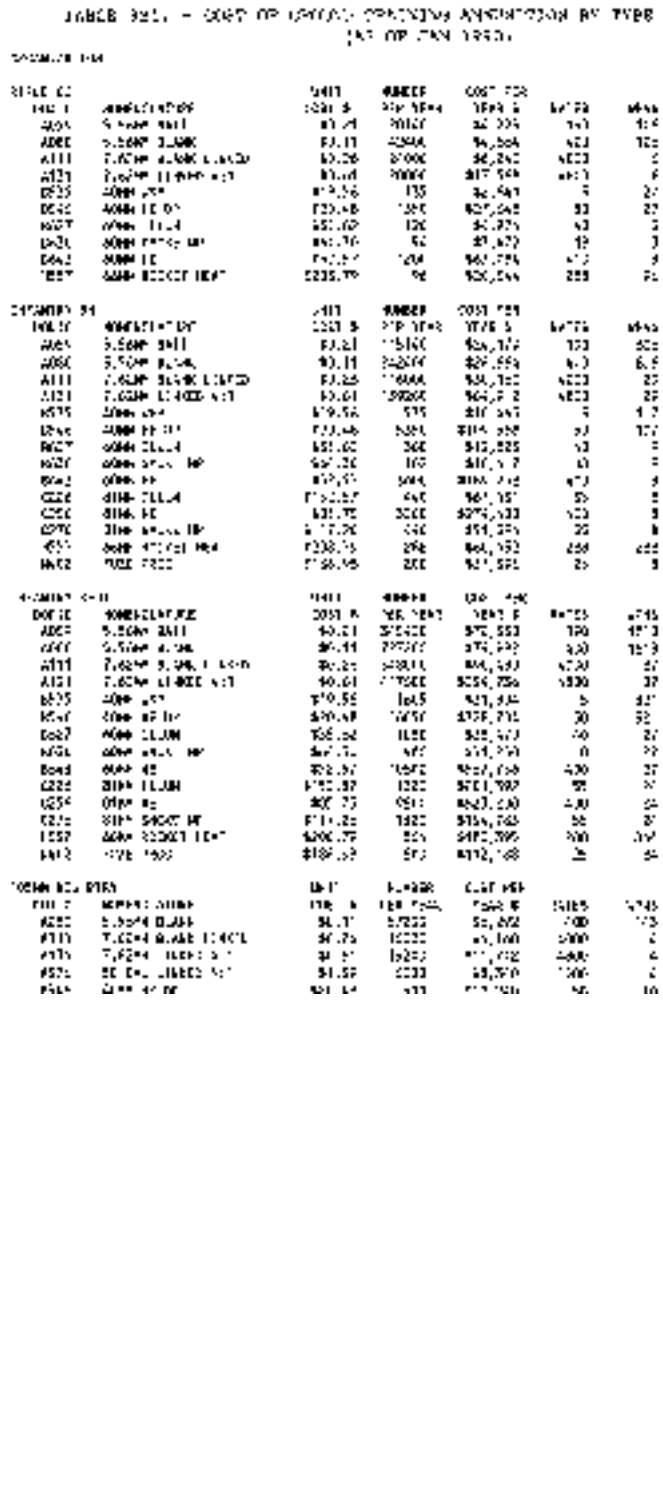

TABLE [illegible] - COST OF GROUND TRAINING MUNITION BY [illegible] CHARACTERISTIC [illegible]
(AS OF JUN 1990)

[illegible]	NOMENCLATURE	UNIT [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] [illegible] DIP*

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] [illegible] [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 3-1. - COST OF GROUND TRAINING AMMUNITION BY TYPE ORGANIZATION (Cont'd)
(AS OF [illegible] 1990)

EQUIPMENT [illegible]		UNIT	NUMBER	COST PER		
DODIC	NOMENCLATURE	COST $	FOR YEAR	YEAR $	RATE	UNITS
A059	5.56MM BALL	$0.21	[illegible]	$72,[illegible]	152	[illegible]15
A080	5.56MM BLANK	$0.11	[illegible]	[illegible]	[illegible]	[illegible]
A111	7.62MM BLANK LINKED	[illegible]	[illegible]	[illegible]	[illegible]	12
A131	7.62MM LINKED 4:1	[illegible]	[illegible]	[illegible]	[illegible]	12
A576	50 CAL [illegible] 4:1	[illegible]	[illegible]	[illegible]	[illegible]	12
B546	40MM HE [illegible]	$20.4[illegible]	[illegible]	[illegible]	[illegible]	30
[illegible]	105MM [illegible]	[illegible]	[illegible]	$1,[illegible]	[illegible]	18
[illegible]	105MM [illegible]	$752.39	[illegible]	[illegible],321	[illegible]	[illegible]
[illegible]	105MM SMOKE [illegible]	[illegible]	[illegible]	[illegible]	12	8
[illegible]	105MM SMOKE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	$1,[illegible]	[illegible]	[illegible]	1	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	155MM [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$2 [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	$108.[illegible]	[illegible]	$1,[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	250	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	$7,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]		UNIT	NUMBER	COST PER		
DODIC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A059	5.56MM BALL	$0.21	[illegible]	[illegible]	[illegible]	[illegible]
A080	5.56MM BLANK	$0.11	[illegible]	[illegible]	[illegible]	[illegible]
A111	7.62MM BLANK LINKED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A131	7.62MM LINKED 4:1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A576	50 CAL LINKED 4:1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	12	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	$2,[illegible].00	12	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]		UNIT	NUMBER	COST PER		
DODIC	NOMENCLATURE	COST $	[illegible]	[illegible]	[illegible]	[illegible]
A059	5.56MM BALL	$0.21	[illegible]	[illegible]	[illegible]	[illegible]
A080	5.56MM BLANK	$0.11	[illegible]	[illegible]	[illegible]	[illegible]
A111	7.62MM BLANK LINKED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A131	7.62MM LINKED 4:1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
A576	50 CAL LINKED 4:1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B546	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 3B1. - COST OF GROUND TRAINING AMMUNITION BY TYPE ORGANIZATION (CONT'D)
(AS OF JAN 1990)

D540	155MM CHG PROP [illegible]	$62.07	875	$48,321	126	6
D541	155MM CHG PROP [illegible]	$61.54	1472	$122,058	246	6
D544	155MM HE	$127.38	1934	$272,[illegible]	306	6
D550	155MM [illegible] HE	$251.38	242	$64,577	40	6
D575	8 INCH CHG PROP [illegible]	[illegible]	674	$81,[illegible]	71	6

FA [illegible] BN 8 INCH		UNIT	NUMBER	COST PER		
DODIC	NOMENCLATURE	COST $	PER YEAR	YEAR $	UNITS	[illegible]
D576	8 INCH CHG PROP [illegible]	$[illegible]	907	$127,[illegible]	100	6
D580	8 INCH HE	$290.65	1386	$525,347	230	6
D581	8 INCH FLASH REDUCER	$73.46	1254	$25,[illegible]	739	6
D582	8 INCH SPOTTING	$1,[illegible]	13	$82,[illegible]	7	6
N285	FUZE MT	$53.25	156	$15,459	31	6
N340	FUZE PD	$15.66	1441	$15,573	240	6
N464	FUZE PROX	$7[illegible]	247	$17,137	90	6
N523	PRIMER	$2.12	2510	$5,237	325	6

TANK CO		UNIT	NUMBER	COST PER		
DODIC	NOMENCLATURE	COST $	PER YEAR	YEAR $	UNITS	MPGS
A[illegible]	7.62MM BLANK LINKED	$0.26	16000	$4,157	[illegible]	[illegible]
A131	7.62MM LINKED 4:1	$0.61	19200	$11,712	4503	5
A576	50 CAL LINKED 4:1	$1.30	4000	$5,761	1570	5
A[illegible]	50 CAL LINKED [illegible]	$[illegible].39	7300	$10,137	1073	5
C[illegible]	105MM HEAT-T	$[illegible].99	5[illegible]	$[illegible],363	[illegible]	15
C5[illegible]	105MM TP-T	$[illegible]	412	$87,[illegible]	[illegible]	15
C512	105MM SMOKE WP T	$[illegible]	[illegible]	$[illegible]	[illegible]	16
C5[illegible]	105MM APDS-T	$[illegible]1.52	[illegible]	$[illegible],581	1	15
C52[illegible]	105MM APDS-T	$[illegible]	[illegible]	$25[illegible]	51	15
G815	GRENADE SMOKE	$[illegible]	5[illegible]	$[illegible]	24	15

ANTI TANK CO		UNIT	NUMBER	COST PER		
DODIC	NOMENCLATURE	COST $	PER YEAR	YEAR $	UNITS	MPGS
A059	5.56MM BALL	$0.2[illegible]	[illegible]	$[illegible],225	[illegible]	153
A0[illegible]	5.56MM [illegible]	$[illegible]	[illegible]	$[illegible],727	[illegible]00	153
A111	7.62MM BLANK LINKED	$0.25	16000	$4,164	[illegible]	[illegible]
A131	7.62MM LINKED 4:1	$0.61	19200	$[illegible],715	[illegible]	[illegible]
L5[illegible]	TOW FLASH SIM	$[illegible]	[illegible]	$[illegible]	100	16

TANK BN		UNIT	NUMBER	COST PER		
DODIC	NOMENCLATURE	COST $	PER YEAR	YEAR $	UNITS	MPGS
A111	7.62MM BLANK LINKED	$0.25	64000	$15,644	[illegible]	16
A131	7.62MM LINKED 4:1	$0.61	76800	$[illegible]	[illegible]	16
A576	50 CAL LINKED 4:1	$1.33	24[illegible]	$33,[illegible]	[illegible]	16
A5[illegible]	50 CAL LINKED [illegible]	$1.53	25[illegible]	$[illegible]	[illegible]	16
C51[illegible]	105MM HEAT-T	$[illegible]71.[illegible]	[illegible]	$[illegible]	34	64
C511	105MM TP-T	$1[illegible]	[illegible]	$[illegible]	[illegible]	64
C512	105MM SMOKE WP	$[illegible].41	575	$1[illegible]	[illegible]	64
C51[illegible]	105MM APDS-T	$[illegible]1.32	54	$58,[illegible]	1	64
C5[illegible]	105MM APDS-T	$[illegible]	[illegible]	$1,[illegible]	91	64
G815	GRENADE SMOKE	$[illegible]	1533	$[illegible]	24	64

DATA SOURCES: HQ [illegible] AND U.S. ARMY [illegible] AND [illegible] COMMAND

[illegible]

TABLE 3-2[illegible]. COST OF HIGH-USAGE TRAINING AMMUNITION BY TYPE WEAPON
(AS OF JAN 19[illegible])

WEAPON	DODIC	NOMENCLATURE	COST PER ROUND/ITEM	REQUIREMENT PER YEAR[1]	COST PER YEAR
RIFLE	A[illegible]	5.56MM TRACER	$0.25	[illegible]	$[illegible]
	A[illegible]	5.56MM TRACER	$0.25	[illegible]	$[illegible]
	A[illegible]	5.56MM BALL	$0.2[illegible]	[illegible]	$10,[illegible]
	A[illegible]	5.56MM BALL	$0.1[illegible]	[illegible]	$2,[illegible]
	A[illegible]	5.56MM BLANK	$0.11	[illegible]	$[illegible]
					$[illegible]
SAW	A[illegible]	5.56MM LINKED [illegible]	$0.2[illegible]	[illegible]	$[illegible]
	A[illegible]	5.56MM [illegible]	$0.2[illegible]	[illegible]	$2,[illegible]
					$[illegible]
MACHINE GUN	A[illegible]	7.62MM LINKED [illegible]	$0.[illegible]	[illegible]	$1[illegible]
	A11[illegible]	7.62MM BLANK LINKED	$0.2[illegible]	[illegible]	$1,[illegible]
					$[illegible]
50 CAL MACHINE GUN	A[illegible]	50 CAL LINKED [illegible]	$[illegible]	[illegible]	$[illegible]
	A[illegible]	50 CAL LINKED [illegible]	$[illegible]	0	$0
					$[illegible]
40MM	A[illegible]	40MM [illegible]	$[illegible]	[illegible]	$[illegible]
	A[illegible]	40MM [illegible]	$[illegible]	[illegible]	$[illegible]
	A[illegible]	40MM [illegible]	$[illegible]	[illegible]	$[illegible]
					$[illegible]
[illegible] LAUNCHER	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible] SMOKE	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
					$[illegible]
[illegible]	[illegible]	[illegible] PRACTICE	$1,[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$1,[illegible]	[illegible]	$[illegible]
					$[illegible]
[illegible]	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	PRACTICE [illegible]	$[illegible]	[illegible]	$[illegible]
					$[illegible]
[illegible] MORTAR					
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
					$[illegible]
[illegible] MORTAR					
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$0
	[illegible]	[illegible]	$[illegible]	[illegible]	$0
	[illegible]	[illegible]	$[illegible]	[illegible]	$0
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
					$[illegible]
[illegible]					
	[illegible]	[illegible]	$[illegible]	[illegible]	$0
	[illegible]	[illegible]	$[illegible]	[illegible]	$[illegible]
	[illegible]	[illegible]	$[illegible]	[illegible]	$0

TABLE 3B2. - COST OF HIGH-USAGE TRAINING AMMUNITION BY TYPE FIRING
FOR CY 2GH 19901

WEAPON	LOT	AMMUNITION	COST PER ROUND/ITEM	ROUNDS/ITEM FIRED	COST FOR YEAR
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					[illegible]
[illegible]					
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					[illegible]
[illegible]					
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	0	[illegible]
					[illegible]
[illegible]					
	[illegible]	[illegible]	[illegible]	0	[illegible]
	[illegible]	[illegible]	[illegible]	1	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	1	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	1	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					[illegible]
					[illegible]

MARINE CORPS COST FACTORS MANUAL

CHAPTER 4

LOGISTICS

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CHAPTER 4

LOGISTICS

4000. GENERAL

1. This chapter provides cost data pertaining to Marine Corps logistic support. The data is presented as follows:

A. Equipment Operation and Maintenance (O&M)

B. Materiel

C. Facilities Construction

D. Transportation

E. Annual Operating and Support (O&S) Costs of Selected Reserve Units

2. Data is explained in detail in each section, with each table footnoted with explanations, sources of data, and OPR, as appropriate.

CHAPTER 4

LOGISTICS

SECTION A: EQUIPMENT OPERATION AND MAINTENANCE (O&M)

4100. INTRODUCTION

1. The basic structure of maintenance systems is standardized throughout DoD into three categories of maintenance: organizational maintenance, intermediate maintenance, and depot maintenance. The Marine Corps subdivides this system, to identify particular maintenance work more precisely, as follows: organizational maintenance (first and second echelons), intermediate maintenance (third and fourth echelons), and depot maintenance (fifth echelon).

2. Organizational maintenance of equipment is the responsibility of and performed by the using unit. Within this category, first echelon maintenance is performed by the user or operator of the equipment. It includes the proper care, use, operation, cleaning, preservation, lubrication and such adjustments, minor repair, testing, and parts replacement as may be prescribed by pertinent technical publications. Also designated as organizational maintenance, second echelon maintenance is the work performed by specially trained personnel in the user organization. Appropriate publications authorize additional tools and necessary parts, supplies, test equipment, and skilled personnel to perform maintenance at the level beyond the capabilities and facilities of the first echelon. Second echelon maintenance includes visual inspection of equipment, preventive maintenance, diagnosis and replacement of parts and components as authorized by the applicable technical manual, and equipment modifications as approved by CMC.

3. Intermediate maintenance (third and fourth echelons) is performed by designated activities in direct support of using organizations. It consists of calibrations and repair/ replacement of damaged or unserviceable parts, components, and assemblies, the emergency manufacture of unavailable parts, equipment modifications, and technical assistance to using organizations.

4. Depot maintenance (fifth echelon) is performed on items requiring major overhaul or complete rebuild of parts, subassemblies, assemblies, or end items, including the manufacture, modification, testing, and reclamation of parts, as required. Depot maintenance supports lower maintenance categories by providing technical assistance and performing maintenance beyond its responsibility.

5. Operating cost data for ground equipment is limited to petroleum, oil, and lubricants (POL) because of the lack of equipment usage information. (Note: cost of POL by type and amount are listed in Table 4B2 [Section B: Materiel]. The NAVMC 1017, TAM, U.S.M.C., section 23, may be referred to for fuel consumption factors).

4101. DATA USE

1. O&M costs should be considered in estimating one-time, recurring and life-cycle expenses of owning, operating, and maintaining Marine Corps equipment. One-time factors would be relevant, for example, in estimations of O&M costs associated with special field exercises or troop movements. Recurring expenses normally pertain to estimates associated with continuing O&M expenses such as equipment lubrication. Life-cycle costs include all anticipated O&M expenses, direct and indirect, over the useful life of equipment, as well as research and development and investment expenses.

2. Tables 4A1 and 4A2 display cost factors pertaining to organizational and intermediate maintenance (i.e., first through fourth echelons) and depot maintenance (i.e., fifth echelon).

a. Table 4A1 provides organizational and intermediate maintenance costs as annual expenses per end item, broken out by echelon of maintenance (first through fourth). Expenses include direct labor and direct materiels. Equipment is arranged by TAM number. To determine the TAM number for a given item of equipment, the user should refer to NAVMC 1017, TAM, U.S.M.C. Input for the formulation of Table 4A1 is from the Materiel Information Maintenance Management System (MIMMS). This system was developed as a maintenance system, and as such, collects selected financial data. It is used to support maintenance decisions and to track maintenance materiel and labor consumption costs by weapon system. Therefore, only this small spectrum of operation support cost is available. Many other costs associated with inventory, transportation, facilities, etc., are not included in these costs. Thus, caution is advised in the use of this data.

b. Table 4A2 gives the average depot maintenance costs and duration of repair for items receiving maintenance at the Depot level. Items are listed by TAM number. Data can be used to estimate costs for items scheduled for depot maintenance.

3. Direct costs per flight hour, presented in Tables 4A3A and 4A3B, are provided as expenses of operating and maintaining Marine aircraft by type/model series. Costs are displayed by component and broken out by regular and reserve forces as follows:

Component

a. Aircraft Operations O&M Component

b. Engine and Depot Overhaul

c. Aircraft Procurement, Navy (APN) Replenishment Spares

Forces

a. Regular Forces FMFLANT

b. Regular Forces FMFPAC

c. Reserve Forces

4. Commercial vehicle O&M data is provided in Table 4A4. They include operating factors (average miles per year and average miles per gallon) as well as cost factors (materiel and labor, direct and indirect). It is important to note these cost factors are average costs over calendar year 1989. Consequently, because of fluctuating prices in POL, these figures may not accurately reflect current POL costs.

TABLE 4A1 TACTICAL EQUIPMENT OPERATING AND MAINTENANCE PLANNING FACTORS FISCAL YEAR 1991

Equipment Type	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
In Use Vehicle Hr	MEAL Hr Cost Time	MEAL Hr Cost Time	MEAL Hr Cost Time	MEAL Hr Cost Time	MEAL Hr Cost Time	MEAL Hr Cost Time	MEAL Hr Cost Time

Data information is available on CMC (Code LMT 3), Phone (703) 695-[illegible]/Autovon 225-[illegible].

TABLE 4A2.-DEPOT MAINTENANCE COSTS[1]
(Type Estimated Costs)

LIN	NOMENCLATURE	MODEL	AVG DEPOT MAINT COSTS PER ITEM[2]	[illegible]
[illegible]	[illegible]	[illegible]	2,765	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Amplifier, [illegible]	[illegible]	22	[illegible]
[illegible]	Analyzer, Spectrum	[illegible]	92	[illegible]
[illegible]	[illegible]	[illegible]	315	[illegible]
[illegible]	Antenna Group	[illegible]	[illegible]	[illegible]
[illegible]	Antenna Mast Kit	[illegible]	26	[illegible]
[illegible]	Air Support Radar Team Comm Central	[illegible]	[illegible]	[illegible]
[illegible]	Battery Charger	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	36	[illegible]
[illegible]	Cable Layer, [illegible]	[illegible]	61	[illegible]
[illegible]	[illegible], Trench	[illegible]	2,799	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Calibrator [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Central, Message Switching	[illegible]	7,232	[illegible]
[illegible]	Central Office, Tele	[illegible]	[illegible]	[illegible]
[illegible]	Central Office, Tele	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Cleaning-Drying, [illegible]		[illegible]	[illegible]
[illegible]	Cleaner, [illegible]		25	[illegible]
[illegible]	Comm Central	[illegible]	225	[illegible]
[illegible]	Comm Central	[illegible]	237	[illegible]
[illegible]	Comm Central	[illegible]	[illegible]	[illegible]
[illegible]	Comm Central	[illegible]	[illegible]	[illegible]
[illegible]	Comm Central, [illegible]	[illegible]	3,752	[illegible]
[illegible]	Comm Central	[illegible]	[illegible]	[illegible]
[illegible]	Comm Central, [illegible]	[illegible]	1,312	[illegible]
[illegible]	Comm Central, Group	[illegible]	152	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	1,252	[illegible]
[illegible]	[illegible]	[illegible]	1,602	[illegible]
[illegible]	Data Comm Terminal	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	205	[illegible]
[illegible]	Direction [illegible]	[illegible]	62	[illegible]
[illegible]	Direction Finder Set	[illegible]	[illegible]	[illegible]
[illegible]	Distance [illegible]	[illegible]	107	[illegible]
[illegible]	Electronic [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible], Tactical	[illegible]	69	[illegible]
[illegible]	[illegible] Set	[illegible]	[illegible]	[illegible]
[illegible]	Frequency [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Generator	[illegible]	35	22.80
[illegible]	Generator, Signal	[illegible]	57	15.83
[illegible]	Generator, Signal	[illegible]	[illegible]	[illegible]
[illegible]	Generator, [illegible], Signal	[illegible]	80	[illegible]
[illegible]	Generator, Signal	[illegible]	68	[illegible]
[illegible]	Generator, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible], Mobile Force [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		1,015	[illegible]
[illegible]	[illegible], Mobile Force [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Heliport Lighting Set		71	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	Intercept Facility, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Intercept Facility, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	Maintenance Kit	[illegible]	[illegible]	[illegible]

TADOC 433.-DEPOT MAINTENANCE COSTS[1]
(FY90 Estimated Costs)

Item	Nomenclature	Model	Avg Annual Maint Hours Per Item	Avg Cost Per Item ($1000)[2]
A0512	Maintenance Set, Electronic	[illegible]	56	$2.22
A0515	Maintenance Set, Elec Equip	[illegible]	1.7	$7.12
A0415	Maintenance Set, Elec Equip	[illegible]	85	$7.31
A0427	[illegible]	[illegible]	6,145	$[illegible]
A0550	Modulator, Motor		15	$2.82
A1015	Multimeter, Digital	[illegible]	75	$3.1[illegible]
A1112	[illegible]	[illegible]	1,721	$[illegible]
A1255	Power Supply	[illegible]	51	$2.22
A1255	Power Supply	[illegible]	87	$[illegible]
A1375	Radio Address Set	[illegible]	45	$2.[illegible]
A1513	Radar, Course [illegible] Equipment	[illegible]	6,326	$[illegible]
A1513	Radar, Course Directing Equipment	[illegible]	22,278	$[illegible]
A1515	Radar, [illegible]	[illegible]	2,[illegible]	$[illegible]
A1515	Radar [illegible]	[illegible]	3,339	$[illegible]
A1515	Radar Set (USSS)	[illegible]	785	$11.22
A1553	Radar Set, Firefinder	[illegible]	11,515	$[illegible]
A1553	Radar Set	[illegible]	8,[illegible]	$[illegible]
A1553	Radar Set	[illegible]	7,483	$[illegible]
A1553	Radar Set: Local, Air Traffic	[illegible]	17,257	$[illegible]
A1555	Radar Set [illegible]	[illegible]	[illegible]	$[illegible]
A1555	Radar Set	[illegible]	4,553	$[illegible]
A1557	Radar Set	[illegible]	4,153	$[illegible]
A1571	Radar Sig Simulator	[illegible]	22	$[illegible]
A1626	Radar Test Set	[illegible]	152	$12.53
A1653	Radar Set, Fire, Mobile	[illegible]	3,[illegible]	$[illegible]
A1653	Radar Control	[illegible]	2,456	$[illegible]
A1654	[illegible]	[illegible]	4,930	$[illegible]
A1733	Radio Interference Measuring Set	[illegible]	62	$[illegible]
A1733	Radio Interference Measuring Set	[illegible]	7	$[illegible]
A1735	Radio Receiver	[illegible]	150	$[illegible]
A1736	Radio Receiver, Miniature	[illegible]	125	$12.50
A1738	Radio Receiving Set	[illegible]	247	$[illegible]
A1736	Radio Set	[illegible]	187	$12.70
A1810	Radio Set	[illegible]	232	$[illegible]
A1815	Radio Set	[illegible]	73	$[illegible]
A1990	Radio Set	[illegible]	91	$[illegible]
A1990	Radio Set	[illegible]	92	$[illegible]
A1995	Radio Set	[illegible]	97	$[illegible]
A1996	Radio Set	[illegible]	336	$[illegible]
A2150	Radio Set	[illegible]	152	$[illegible]
A2170	Radio Set	[illegible]	66	$[illegible]
A2180	Radio Set	[illegible]	55	$[illegible]
A2365	Radio Set	[illegible]	41	$[illegible]
A2390	Radio Set: [illegible] Channel	[illegible]	[illegible]	$[illegible]
A2401	Radio Set: [illegible] Channel	[illegible]	1,284	$[illegible]
A2450	Radio Set	[illegible]	41	$[illegible]
A2550	Radio Set	[illegible]	41	$[illegible]
A2701	Radio Set	[illegible]	252	$[illegible]
A2702	Radio Terminal Set	[illegible]	318	$[illegible]
A2702	Radio Terminal Set	[illegible]	171	$[illegible]
[illegible]	Radio [illegible] Set	[illegible]	265	$[illegible]
A2[illegible]	Receiving Set, Radio	[illegible]	142	$[illegible]
A2[illegible]	[illegible]	[illegible]	24	$[illegible]
A2207	[illegible]	[illegible]	103	$6.22
A2[illegible]	Separator, Regenerative	[illegible]	149	$7.1[illegible]

TABLE 4A2.-DEPOT MAINTENANCE COSTS[1]
(FY90 Estimated Costs)

TAM	[illegible]	NSN	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		211	[illegible]
[illegible]	[illegible]	[illegible]		236	[illegible]
[illegible]	[illegible]	[illegible]		254	[illegible]
[illegible]	[illegible]	[illegible]		1,271	[illegible]
[illegible]	[illegible]	[illegible]		202	[illegible]
[illegible]	[illegible]	[illegible]		1,097	[illegible]
[illegible]	[illegible]	[illegible]		1,715	[illegible]
[illegible]	[illegible]	[illegible]		73	[illegible]
[illegible]	[illegible]	[illegible]		196	[illegible]
[illegible]	[illegible]	[illegible]		75	[illegible]
[illegible]	[illegible]	[illegible]		202	[illegible]
[illegible]	[illegible]	[illegible]		332	[illegible]
[illegible]	[illegible]	[illegible]		1,659	[illegible]
[illegible]	[illegible]	[illegible]		2,375	[illegible]
[illegible]	[illegible]	[illegible]		2,131	[illegible]
[illegible]	[illegible]	[illegible]		1,578	[illegible]
[illegible]	[illegible]	[illegible]		43	[illegible]
[illegible]	[illegible]	[illegible]		137	[illegible]
[illegible]	[illegible]	[illegible]		94	[illegible]
[illegible]	[illegible]	[illegible]	75%	333	[illegible]
[illegible]	[illegible]	[illegible]		1,272	[illegible]
[illegible]	[illegible]	[illegible]		2,175	[illegible]
[illegible]	[illegible]	[illegible]		71	[illegible]
[illegible]	[illegible]	[illegible]		73	[illegible]
[illegible]	[illegible]	[illegible]		275	[illegible]
[illegible]	[illegible]	[illegible]		375	[illegible]
[illegible]	[illegible]	[illegible]		225	[illegible]
[illegible]	[illegible]	[illegible]		173	[illegible]
[illegible]	[illegible]	[illegible]		73	[illegible]
[illegible]	[illegible]	[illegible]		73	[illegible]
[illegible]	[illegible]	[illegible]		169	[illegible]
[illegible]	[illegible]	[illegible]		153	[illegible]
[illegible]	[illegible]	[illegible]		75	[illegible]
[illegible]	[illegible]	[illegible]		69	[illegible]
[illegible]	[illegible]	[illegible]		503	[illegible]
[illegible]	[illegible]	[illegible]		173	[illegible]
[illegible]	[illegible]	[illegible]		65	[illegible]
[illegible]	[illegible]	[illegible]		73	[illegible]
[illegible]	[illegible]	[illegible]		2,275	[illegible]
[illegible]	[illegible]	[illegible]		93	[illegible]
[illegible]	[illegible]	[illegible]		69	[illegible]
[illegible]	[illegible]	[illegible]		62	[illegible]
[illegible]	[illegible]	[illegible]		93	[illegible]
[illegible]	[illegible]	[illegible]		73	[illegible]
[illegible]	[illegible]	[illegible]		69	[illegible]
[illegible]	[illegible]	[illegible]		192	[illegible]
[illegible]	[illegible]	[illegible]		576	[illegible]
[illegible]	[illegible]	[illegible]		11,329	[illegible]
[illegible]	[illegible]			10,215	[illegible]
[illegible]	[illegible]			529	[illegible]
[illegible]	[illegible]	[illegible]		33	[illegible]
[illegible]	[illegible]			21	[illegible]
[illegible]	[illegible]			69	[illegible]
[illegible]	[illegible]			59	[illegible]

TABLE 4A2.-DEPOT MAINTENANCE COSTS[1]
(FY90 Estimated Costs)

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Compressor, Air [illegible]		[illegible]	[illegible]
[illegible]	Compressor	[illegible]	[illegible]	[illegible]
[illegible]	Compressor, Air [illegible]		[illegible]	[illegible]
[illegible]	Compressor, Air Rotary [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Crane, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Crane, Crawler, [illegible]		[illegible]	[illegible]
[illegible]	Crane, Crawler [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Crane, [illegible] Mtd	[illegible]	[illegible]	[illegible]
[illegible]	Crane, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Crane, Wheel Mtd	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Plant		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Hammer, [illegible]		[illegible]	[illegible]
[illegible]	[illegible], [illegible]		[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	Floodlight Set	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible] Converter [illegible]		[illegible]	[illegible]
[illegible]	Frequency Converter [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Converter, [illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible], Amphib [illegible], [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	Generator Set, [illegible]		[illegible]	[illegible]
[illegible]	Generator Set [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	Generator Set [illegible]		[illegible]	[illegible]
[illegible]	Generator Set	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Generator Set	[illegible]	[illegible]	[illegible]
[illegible]	[illegible], [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible], [illegible], [illegible]		[illegible]	[illegible]
[illegible]	Helicopter [illegible]		[illegible]	[illegible]
[illegible]	[illegible] Plant	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Machine	[illegible]	[illegible]	[illegible]
[illegible]	[illegible], [illegible], [illegible]		[illegible]	[illegible]
[illegible]	Laundry [illegible], [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Reproduction [illegible]		[illegible]	[illegible]
[illegible]	Engine Set, [illegible]		[illegible]	[illegible]
[illegible]	Mixer, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible] Tool [illegible]		[illegible]	[illegible]
[illegible]	[illegible], [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Pump, [illegible]		[illegible]	[illegible]
[illegible]	Refrigeration Unit [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Refrigerator, [illegible]		[illegible]	[illegible]
[illegible]	Refrigerator, [illegible]		[illegible]	[illegible]
[illegible]	[illegible] Unit		[illegible]	[illegible]
[illegible]	[illegible] Assessment	[illegible]	[illegible]	[illegible]
[illegible]	[illegible], [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible], Tance		[illegible]	[illegible]
[illegible]	[illegible], [illegible]	[illegible]	[illegible]	[illegible]

TABLE 4R1.-DEPOT MAINTENANCE COSTS[1]
(FY90 Estimated Costs)

TAM	NOMENCLATURE	MODEL	AVG EQUIP MAINT HOURS PER ITEM[2]	AVG COST PER ITEM($)[3]
[illegible]	Roller, Towed	[illegible]	110	$[illegible]
[illegible]	Roller, Towed	[illegible]	170	$[illegible]
[illegible]	Saw, Radial, Concrete	[illegible]	151	$[illegible]
[illegible]	Saw, Radial, Concrete [illegible]		76	$[illegible]
[illegible]	[illegible]	[illegible]	506	$[illegible]
[illegible]	Scraper, Earthmoving, Towed	[illegible]	519	$[illegible]
[illegible]	Scraper	[illegible]	586	$[illegible]
[illegible]	Shop Equip, Contin., Petrol	[illegible]	116	$[illegible]
[illegible]	Shop Equip, Const		103	$[illegible]
[illegible]	Shop Equip, Const		145	$[illegible]
[illegible]	Shop Equip, Const		154	$[illegible]
[illegible]	Shop Equip, Engineer		622	$[illegible]
[illegible]	Shop Equip, [illegible]		677	$[illegible]
[illegible]	[illegible]	[illegible]	744	$[illegible]
[illegible]	Survey Set, Auxiliary		757	$[illegible]
[illegible]	Survey Set, [illegible]		779	$[illegible]
[illegible]	Survey Equip Set, Const		2,[illegible]	$[illegible]
[illegible]	Sweeper, Industrial		9	$[illegible]
[illegible]	Sweeper Set, [illegible]		[illegible]	$[illegible]
[illegible]	Tactical Impl, Cargoes [illegible]		2,986	$[illegible]
[illegible]	Sweeper, Street		69	$[illegible]
[illegible]	Tank, Water, Collapsible 5,000 Gal		483	$[illegible]
[illegible]	Tractor, Hed Full Trailer	[illegible]	772	$[illegible]
[illegible]	Tractor, [illegible]	[illegible]	656	$[illegible]
[illegible]	Tractor, Utility		966	$[illegible]
[illegible]	Tractor, Rubber Tired	[illegible]	96	$[illegible]
[illegible]	Tractor, [illegible]	[illegible]	205	$[illegible]
[illegible]	Tractor, Rubber Tired	[illegible]	646	$[illegible]
[illegible]	Tractor Wheeled	[illegible]	1,167	$[illegible]
[illegible]	Truck, Forklift	[illegible]	1,153	$[illegible]
[illegible]	Water Distribution Equip		247	$[illegible]
[illegible]	Water Dist Equip Set	[illegible]	375	$[illegible]
[illegible]	Water Purification Set, 600 GPH	[illegible]	77	$[illegible]
[illegible]	Chemical, Sweep	[illegible]	474	$[illegible]
[illegible]	[illegible], Sweep	[illegible]	[illegible]	$[illegible]
[illegible]	Crane, [illegible]	[illegible]	1,257	$[illegible]
[illegible]	Shower, [illegible]	[illegible]	78	$[illegible]
[illegible]	Dolly Trlr, Converter [illegible]	[illegible]	65	$[illegible]
[illegible]	Dolly Trlr, Converter [illegible]	[illegible]	67	$[illegible]
[illegible]	[illegible] Service [illegible]		399	$[illegible]
[illegible]	Semi Trlr, Refuler	[illegible]	[illegible]	$[illegible]
[illegible]	Semi Trlr, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Semi Trlr, Low Bed	[illegible]	436	$[illegible]
[illegible]	Semi Trlr, Low Bed	[illegible]	[illegible]	$[illegible]
[illegible]	Semi Trlr, Stake	[illegible]	187	$[illegible]
[illegible]	Semi Trlr, Shop	[illegible]	253	$[illegible]
[illegible]	Semi Trlr, [illegible] Parts Shop [illegible]	[illegible]	665	$[illegible]
[illegible]	Semi Trlr, Fuel	[illegible]	722	$[illegible]
[illegible]	Semi Trlr, [illegible]	[illegible]	551	$[illegible]
[illegible]	Semi Trlr, Van, Expense Diesel	[illegible]	357	$[illegible]
[illegible]	Semi Trlr, Van, Refrigerator	[illegible]	775	$[illegible]
[illegible]	Shop Set, [illegible]		722	$[illegible]
[illegible]	Shop Set, Automotive [illegible]		262	$[illegible]
[illegible]	Shop, F4 Auto Fuel and [illegible]	[illegible]	779	$[illegible]
[illegible]	Shop Set, Auto Fuel [illegible]		727	$[illegible]

TABLE 4-12.-DEPOT MAINTENANCE COSTS[1]
[FY90 Estimated costs]

[illegible]	[illegible]	[illegible]	AVG DEPOT MAINT FREQUENCY [illegible]	AVG COST PER [illegible]
[illegible]	Shop Set, [illegible] Supp No. 1		[illegible]	[illegible]
[illegible]	Shop Set, [illegible] Supp No. 2		[illegible]	[illegible]
[illegible]	Heater, [illegible]		262	[illegible]
[illegible]	Trlr, Cargo 3/4 Ton	[illegible]	[illegible]	[illegible]
[illegible]	Trlr, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trlr, Tank, Water	[illegible]	[illegible]	[illegible]
[illegible]	Trlr, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Ambulance [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Ambulance [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Ambulance [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Cargo [illegible] w/Winch	[illegible]	87	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Cargo 5 Ton [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Cargo 5 [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Crash, Fire and Rescue	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Crash, Fire and Rescue	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Dump 5 Ton	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Firefighting, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Firefighting, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Firefighting, Structural	[illegible]	[illegible]	[illegible]
[illegible]	Trk, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Platform [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Tank [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Tank, Water [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Tractor 5 Ton	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Tractor	[illegible]	[illegible]	[illegible]
[illegible]	Trk, [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Van [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Trk, Wrecker 5T	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Computer, Gun Direction	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Guided Missile, Training	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Information [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	Interrogator [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Interrogator Set, Programmer	[illegible]	181	[illegible]
[illegible]	Interrogator IFF	[illegible]	[illegible]	[illegible]

TABLE 4-[illegible].-DEPOT MAINTENANCE COSTS[1]
(FY90 Estimated Costs)

LIN	NOMENCLATURE	MODEL	AVG DEPOT MAINT HOURS PER ITEM[2]	AVG COST PER ITEM (FY90)[3]
[illegible]	Assault Amphibian, [illegible]	[illegible]	2,888	$[illegible]
[illegible]	Assault Amphibian, [illegible]	[illegible]	2,819	$[illegible]
[illegible]	[illegible] Vehicle, [illegible]	[illegible]	2,730	$[illegible]
[illegible]	Launcher Tub	[illegible]	[illegible]	$[illegible]
[illegible]	Launcher, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible] Transporter, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Machine Gun, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Machine Gun, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Meteorologic [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Meteorologic [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible] Maintenance Shop	[illegible]	1,[illegible]	$[illegible]
[illegible]	[illegible] Set, Guided [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Mortar, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Night Vision [illegible]		[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Night Vision Sight, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Night Vision Sight, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Night Vision Sight, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Night Vision Sight, Crew	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Radar Set [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Radar Set [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Radar Set [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Radar Set [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible] Check Set	[illegible]	[illegible]	$[illegible]
[illegible]	Radiosonde Receptor	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Recovery Vehicle [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	1,[illegible]	$[illegible]
[illegible]	Shop, Equip, [illegible]	[illegible]	1,[illegible]	$[illegible]
[illegible]	Shop, Equip, [illegible]	[illegible]	1,[illegible]	$[illegible]
[illegible]	Shop, Equip, [illegible]	[illegible]	1,[illegible]	$[illegible]
[illegible]	Shop, Equip, Remote [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Shop, Equip, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible] Station, Radar Signal	[illegible]	[illegible]	$[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Test Facility System	[illegible]	[illegible]	$[illegible]
[illegible]	Test [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Test Set	[illegible]	[illegible]	$[illegible]
[illegible]	Test Set [illegible]		[illegible]	$[illegible]
[illegible]	Test Set, Guided Missile	[illegible]	[illegible]	$[illegible]
[illegible]	Test Set, [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Test Set, Guided Missile [illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	Test Set	[illegible]	[illegible]	$[illegible]
[illegible]	Tool Kit, [illegible]		[illegible]	$[illegible]
[illegible]	[illegible] Set	[illegible]	[illegible]	$[illegible]
[illegible]	Tool Set, [illegible]		[illegible]	$[illegible]
[illegible]	Tool Set	[illegible]	[illegible]	$[illegible]
[illegible]	Tool Kit	[illegible]	[illegible]	$[illegible]

1/ Only those items with an average cost per item of $1,000 or more are listed.

2/ Estimated, based on historical data and projected on basis of acquisition costs. Represents the average time needed to repair those items that enter depot maintenance in a given year.

3/ Derived by applying an inflation factor of 3.2 percent.

OPR: CG I&L (LPR3), Phone (703) 696-1059, AUTOVON 226-1059

TABLE 4-3A. - DIRECT COSTS PER FLIGHT HOUR[1]
REGULAR FORCES
(FY90 BUDGET DOLLARS)

[illegible]	Annual Hours	Cost per Hour: [illegible]	[illegible]	[illegible]	TOTAL	Annual Costs in Millions: [illegible]	[illegible]	[illegible]	TOTAL	Hourly Fuel Consumption (BBL)[2]
[illegible]										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Data covers TACAIR and Land forces aircraft in the Regular Establishment. All costs are navy-funded and include POL, depot level reparables; intermediate and organizational level maintenance; and squadron supplies.

2/ Fuel consumption is in 42 gallon barrels per hour (BBL).

Data Source: OP-20 Flying Hour Program Budget (Feb 90)

OPR: CMC (APP-41), Phone (703) 614-2189, AUTOVON 224-2189

TABLE [illegible] -- DIRECT COSTS PER FLIGHT HOUR[1]
RESERVE FORCES
(FY90 BUDGET DOLLARS)

[illegible] SERIES	[illegible] HOURS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] FUEL[2] [illegible]
RESERVES										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Data covers TACAIR and land forces aircraft in the Reserve Establishment. All costs are Navy-funded and include POL, depot level reparables; intermediate and organizational level maintenance; and squadron supplies.

2/ Fuel consumption is in 42 gallon barrels per hour (BBL).

Data Source: OP-20 Flying Hour Program Budget (Feb 90)

OPR: CMC (APP-41), Phone (703) 614-2189, AUTOVON 224-2189

Table 4A1 - COMMERCIAL VEHICLE O&M COSTS
(as of April 1990)

VEHICLE TYPE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PASSENGER VEHICLES							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TRUCKS 1/4 TO 1/2 TON							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TRUCKS 3/4 TO 1 TON							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TRUCKS 1 1/2 TO 2 TON							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TRUCKS 2 1/2 TO 5 TON							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TRUCKS 10 TON							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MARINE CORPS COST FACTORS MANUAL

CHAPTER 4

LOGISTICS

SECTION B: MATERIEL

4200. INTRODUCTION

1. Data listed in this section is associated with procurement of selected materiel by and/or for the Marine Corps.

2. Table 4B1 contains data relative to the unit costs of principal items of FMF ground equipment and information pertaining to the life expectancy of such equipment. Table 4B2 lists prices of high-usage POL's.

4201. DATA USE. Data contained herein can be used in the estimation of costs relative to the development or modification of tables of equipment. In general, replacement costs should

be used because they more accurately reflect the current value of an item. Also, dissemination of this data can be effective in promoting cost consciousness.

TABLE 4B1.-EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

TAMCN	NAME OF ITEM	MODEL NO	REPLACEMENT COST (TOTAL)	STANDARD UNIT COST	LIFE EXPECTANCY
[illegible]	ACCESSORY MAINTENANCE KIT, TELEPHONE	[illegible]	2,517	[illegible]	
[illegible]	ADAPTER/TESTER SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AIRBORNE MOBILE DIRECT AIR SUPPORT CENTRAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	AIRBORNE MOBILE DIRECT AIR SUPPORT CENTRAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ANALYZER, DISTORTION	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	10,258	[illegible]	
[illegible]	ANTENNA	[illegible]	10,647	15,[illegible]	
[illegible]	ANTENNA GROUP	[illegible]	[illegible]	2,[illegible]	
[illegible]	ANTENNA [illegible]	[illegible]	[illegible]	3,[illegible]	
[illegible]	AUTOMATED DATA PROCESSING EQUIPMENT, [illegible]		[illegible]	[illegible]	
[illegible]	BATTERY CHARGER	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	CALIBRATION AND REPAIR FACILITY, MECHANICAL	[illegible]	[illegible]	[illegible]	
[illegible]	CALIBRATION COMPLEX, [illegible]	[illegible]	[illegible]	275,[illegible]	
[illegible]	CALIBRATION [illegible], ELECTRONIC		1,[illegible]	[illegible]	
[illegible]	CALIBRATION SET, TRANSPORTABLE	[illegible]	[illegible]	[illegible]	
[illegible]	CALIBRATOR SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	1,[illegible]	[illegible]	
[illegible]	CENTRAL OFFICE, TELEPHONE AUTO, [illegible] LINES	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	CENTRAL OFFICE, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COMMUNICATIONS CENTRAL	[illegible]	1,[illegible]	[illegible]	[illegible]
[illegible]	COMMAND COMMUNICATIONS [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COMMUNICATION CENTRAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COMMUNICATIONS CENTRAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COMMUNICATION CENTRAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COMMUNICATIONS CENTRAL [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	COMMUNICATIONS TERMINAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COMMUNICATION STATION	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	COMMUNICATIONS CENTRAL	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	CONTROL, RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	1,[illegible]	
[illegible]	CONVERTER, TELEPHONE SIGNAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	FREQUENCY CONVERTER SOLID STATE, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	DATA COMMUNICATIONS TERMINAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	DATA RELAY [illegible]	[illegible]	5,[illegible]	[illegible]	
[illegible]	DECODER GROUP	[illegible]	[illegible]	[illegible]	
[illegible]	DIAGNOSTIC KIT	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	11,[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	DIGITAL COMM TERMINAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	75,[illegible]	
[illegible]	DIRECT AIR SUPPORT CENTRAL [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	DIRECTION FINDING [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	10,[illegible]	[illegible]	
[illegible]	ELECTRONIC TEST REPAIR FACILITY		[illegible]	[illegible]	

TABLE 4B1.-EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

[illegible]	NAME OF ITEM	[illegible] NO	[illegible] (1990)	[illegible] UNIT COST	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible], TELEPHONE LINE	[illegible]	[illegible]	[illegible]	
[illegible]	FIBER OPTIC [illegible] SET	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	21,[illegible]	15.[illegible]	[illegible]
[illegible]	GENERATOR, SIGNAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	GENERATOR, SIGNAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	GENERATOR [illegible], SIGNAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	GENERATOR SIGNAL	[illegible]	6,[illegible]	[illegible]	
[illegible]	GENERATOR [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	GENERATOR, SIGNAL [illegible]	[illegible]	[illegible]	6.[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	1,200.[illegible]	7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible] INTERPRETATION [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	INSTALLATION KIT, AIRBORNE [illegible]	[illegible]	[illegible]		
[illegible]	INSTALLATION KIT [illegible]	[illegible]	[illegible]		
[illegible]	INTELLIGENCE ANALYSIS CENTER [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MONITORING SET, RADIO SIGNAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	1,[illegible]	
[illegible]	MAINTENANCE [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MAINTENANCE COMPLEX, ELECTRONIC		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MAINTENANCE KIT, ELECTRONIC EQUIPMENT	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MAINTENANCE SUPPORT KIT	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] SATELLITE COMMUNICATIONS TERMINAL	[illegible]	[illegible]	[illegible]	55
[illegible]	MOBILE [illegible] SUPPORT [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] DIGITAL DATA	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	22,[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	7,[illegible]	[illegible]	
[illegible]	OSCILLOSCOPE	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	OSCILLOSCOPE	[illegible]	[illegible]		[illegible]
[illegible]	OSCILLOSCOPE	[illegible]	[illegible]	[illegible]	
[illegible]	OSCILLOSCOPE	[illegible]	[illegible]	[illegible]	
[illegible]	OSCILLOSCOPE	[illegible]	[illegible]	[illegible]	
[illegible]	OSCILLOSCOPE	[illegible]	7,[illegible]	[illegible]	
[illegible]	OSCILLOSCOPE STORAGE	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	PILOT CONTROL [illegible]		[illegible]		
[illegible]	[illegible] SIGNAL GENERATOR	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	16.[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible] RADIO, [illegible]		[illegible]	[illegible]	
[illegible]	POWER [illegible] SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	POWER SUPPLY [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] LOCATION [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	POWER SUPPLY SET	[illegible]	[illegible]	[illegible]	
[illegible]	POWER SUPPLY	[illegible]	[illegible]	[illegible]	
[illegible]	POWER SUPPLY, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	POWER SUPPLY	[illegible]	[illegible]	[illegible]	
[illegible]	POWER SUPPLY	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 4B1.—EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

LIN	NAME OF ITEM	TYPE NO	REPLACEMENT [illegible]	AVERAGE UNIT COST	LIFE EXPECTANCY
[illegible]	PROCESSOR GROUP, [illegible]	OL 275/[illegible]	21,315	16,215	40
[illegible]	PROGRAMMING [illegible] TOOL	[illegible]	7,[illegible]	[illegible]	30
[illegible]	PUBLIC ADDRESS SET	AN/TIQ-[illegible]	2,[illegible]	550	
[illegible]	PUBLIC ADDRESS SET		2,[illegible]		
[illegible]	PUBLIC ADDRESS SET	[illegible]	[illegible]	7,[illegible]	36
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADAR RELAY SET	[illegible]	[illegible]	[illegible]	12
[illegible]	RADAR SET, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADAR SET, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADAR SET, FIREFINDER	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADAR SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADAR SET, [illegible] CONTROL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADAR SET, [illegible] AIR TRAFFIC CONTROL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADAR SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible] BEACON [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIAC SET	[illegible]	[illegible]	[illegible]	
[illegible]	RADIAC SET	[illegible]	[illegible]		
[illegible]	RADIAC SET	[illegible]	[illegible]	500	
[illegible]	RADIAC SET	[illegible]	[illegible]	522	
[illegible]	RADIAC SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ANTENNA [illegible] GROUP	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO FREQUENCY MONITORING [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO [illegible]		[illegible]		
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	55,9[illegible]	
[illegible]	RADIO SET	[illegible]	42,575	[illegible]	
[illegible]	RADIO SET	[illegible]	42,575	[illegible]	
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET, [illegible]	[illegible]	[illegible]		
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO SET, [illegible]	[illegible]	9,[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	15,[illegible]	
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	10,[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RADIO SET	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 4D1.--EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

TAMCN	NAME OF ITEM	MFG. ID	REPLACEMENT COST (1990)	STANDARD UNIT PRICE	LIFE EXPECT. (MOS)
[illegible]	[illegible] TERMINAL SET	[illegible]	56,768	21,828	121
[illegible]	[illegible]	[illegible]	55,592	[illegible]	13
[illegible]	[illegible]	[illegible]	55,592	[illegible]	13
[illegible]	RECEIVER, LF SP	[illegible]	[illegible]	[illegible]	14
[illegible]	RECORDER, SIGNAL DATA	[illegible]	[illegible]	[illegible]	30
[illegible]	[illegible]		[illegible]	[illegible]	36
[illegible]	RECEIVER SET, RADIO [illegible]	[illegible]	22,225	[illegible]	2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible], BASIC [illegible]	[illegible]	[illegible]	[illegible]	30
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30
[illegible]	SHELTER, ELECTRONIC MAINTENANCE SUPPORT	[illegible]	[illegible]	[illegible]	
[illegible]	SHELTER, ELECTRONIC MAINTENANCE SUPPORT	[illegible]	[illegible]	[illegible]	
[illegible]	SHELTER, ELECTRONIC MAINTENANCE [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	SHELTER, TACTICAL [illegible]		[illegible]	[illegible]	
[illegible]	SHELTER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	SHELTER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]		
[illegible]	[illegible], ELECTRONIC	[illegible]	[illegible]	[illegible]	120
[illegible]	[illegible], ELECTRONIC	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible], ELECTRONIC	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible], ELECTRONIC	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible], ELECTRONIC	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible], ELECTRONIC	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible], ELECTRONIC	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible], ELECTRONIC MAINTENANCE	[illegible]	[illegible]	[illegible]	42
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	SWITCHBOARD, TELEPHONE, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	SWITCHBOARD, TELEPHONE, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36
[illegible]	SWITCHBOARD, TELEPHONE, AUTOMATIC	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	SWITCHING UNIT, [illegible], AUTOMATIC	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TACTICAL AIR OPERATIONS MODULE [illegible]	[illegible]	[illegible]	[illegible]	12
[illegible]	TACTICAL AIR OPERATIONS [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	43
[illegible]	TACTICAL ELECTRONIC [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TACTICAL DATA [illegible] CENTRAL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TACTICAL RECEIVE [illegible] SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TELEPHONE SET	[illegible]	[illegible]		
[illegible]	TERMINAL SET, [illegible], TELEPHONE	[illegible]	[illegible]	[illegible]	
[illegible]	TERMINAL SET [illegible]	[illegible]	[illegible]	[illegible]	42
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TERMINAL, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	36
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	36
[illegible]	TEST [illegible] FACILITY	[illegible]	[illegible]	[illegible]	30
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	

TABLE 4B1.—EQUIPMENT COST AND LIFE EXPECTANCY DATA (AS OF MAR 1990)

LIN	NAME OF ITEM	MODEL NO	REPLACEMENT COST (UNIT)	STANDARD UNIT COST	LIFE EXPECTANCY (MOS)
[illegible]	TEST SET	[illegible]	[illegible]	2,485	
[illegible]	TEST SET, ADAPTER/DETONATOR	[illegible]	241,829	5,557	
[illegible]	TEST SET, [illegible]	[illegible]	490,273	2,999	
[illegible]	TEST SET, ELECTRONIC CIRCUIT	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET GROUP, RADIO	[illegible]	25,197	12,467	30
[illegible]	TEST UNIT	[illegible]	77,532	[illegible]	100
[illegible]	TEST UNIT	[illegible]	24,548	12,500	120
[illegible]	TEST UNIT	[illegible]	35,129	17,400	100
[illegible]	TEST UNIT	[illegible]	42,822	31,000	100
[illegible]	TEST SET, RADAR	[illegible]	[illegible]	13,000	
[illegible]	TEST SET, RADAR	[illegible]	67,111		
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]		
[illegible]	TEST SET, RADIO	[illegible]	2,181	1,000	
[illegible]	TEST SET, RADIO	[illegible]	33,952	16,100	
[illegible]	TEST SET, RADIO	[illegible]	71,328	37,077	
[illegible]	TEST SET, RADIO	[illegible]	5,421	2,075	120
[illegible]	TEST SET, REFRIGERATION [illegible]	[illegible]	3,072	4,070	12
[illegible]	TEST SET, [illegible], SET RADIO	[illegible]	[illegible]	45,273	
[illegible]	TEST SET, [illegible]	[illegible]	11,072	7,075	
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SYSTEM, DIGITAL ASSEMBLY	[illegible]	29,528	17,000	[illegible]
[illegible]	TOOL KIT, ELECTRONIC [illegible] NIGHT [illegible]	[illegible]	5,505	[illegible]	
[illegible]	TOOL KIT, [illegible] NIGHT [illegible]	[illegible]	5,545		
[illegible]	TOOL ASSEMBLY	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] CABLE, [illegible]	[illegible]	[illegible]	1,943	
[illegible]	TRAILER CABLE REEL	[illegible]	6,997		
[illegible]	[illegible]	[illegible]	[illegible]	980	
[illegible]	TRAILER [illegible]		2,211		
[illegible]	TRAILER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRANSLATOR TRANSCRIBER FACILITY	[illegible]	[illegible]	[illegible]	
[illegible]	TRANSPONDER SET, [illegible]	[illegible]	42,419	[illegible]	30
[illegible]	TRANSPONDER SET	[illegible]	2,709	[illegible]	
[illegible]	[illegible]	[illegible]	272,590	[illegible]	
[illegible]	ANALYZER, SPECTRUM	[illegible]	12,486	[illegible]	
[illegible]	ANALYZER, SPECTRUM	[illegible]	73,196	[illegible]	
[illegible]	ANALYZER, SPECTRUM	[illegible]	3,998	2,600	60
[illegible]	ANALYZER, SPECTRUM	[illegible]	3,998	3,025	
[illegible]	[illegible] ANALYZER, PORTABLE	[illegible]	40,926	22,594	
[illegible]	ANALYZER, [illegible] PROGRAMMABLE	[illegible]	21,462	[illegible]	120
[illegible]	ANALYZER, [illegible]	[illegible]	7,172	8,942	
[illegible]	ANALYZER, DATA ERROR	[illegible]	3,455	2,215	
[illegible]	[illegible]	[illegible]	17,955	[illegible]	
[illegible]	[illegible] COUNTER, [illegible]	[illegible]	[illegible]	1,273	[illegible]
[illegible]	COUNTER, ELECTRONIC	[illegible]	1,642	1,275	[illegible]
[illegible]	COUNTER, FREQUENCY	[illegible]	5,399	3,895	
[illegible]	COUNTER, ELECTRONIC, DIGITAL [illegible]	[illegible]	10,259	[illegible]	
[illegible]	COUNTER, ELECTRONIC, DIGITAL READOUT, [illegible]	[illegible]	15,153	7,259	
[illegible]	[illegible]	[illegible]	3,795	2,747	
[illegible]	COUNTER, MICROWAVE PULSE	[illegible]	12,527	12,773	
[illegible]	[illegible]	[illegible]	9,757	5,335	120
[illegible]	GENERATOR, PULSE PROGRAMMABLE	[illegible]	15,872	15,397	
[illegible]	GENERATOR, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	GENERATOR, SIGNAL [illegible]	[illegible]	[illegible]	13,350	
[illegible]	GENERATOR, SIGNAL, SWEEP	[illegible]	27,197	15,460	
[illegible]	GENERATOR, SWEEP	[illegible]	24,558	57,325	

TABLE 4B1.-EQUIPMENT COST AND LIFE EXPECTANCY DATA (AS OF MAR 1986)

[illegible]	NAME OF ITEM	MODEL NO	[illegible] COST	[illegible]	LIFE EXPECTANCY
[illegible]	GENERATOR, SWEEP	[illegible]	5,[illegible]	22,300	
[illegible]	GENERATOR, SIGNAL PROGRAMMABLE	[illegible]	[illegible]	22,9[illegible]	[illegible]
[illegible]	MONITOR UNIT, RADIO [illegible]	[illegible]	1,2[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	2,3[illegible]	
[illegible]	OSCILLOSCOPE	[illegible]	[illegible]	5,421	
[illegible]	OSCILLOSCOPE	[illegible]	[illegible]	5,4[illegible]	
[illegible]	OSCILLOSCOPE	[illegible]	5,[illegible]	1,1[illegible]	
[illegible]	OSCILLOSCOPE	[illegible]	[illegible]	[illegible]	
[illegible]	PROGRAMMABLE MICROPROCESSOR [illegible]	[illegible]	15,[illegible]	12,1[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	10,5[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	10,5[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TESTER, INSTRUMENT CONTROLLER	[illegible]	[illegible]	15,[illegible]	[illegible]
[illegible]	TESTER, METER, MODULATION, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TESTER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TESTER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TESTER, [illegible]	[illegible]		[illegible]	[illegible]
[illegible]	TESTER, [illegible]	[illegible]	15,31[illegible]	[illegible]	
[illegible]	TESTER, [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	TESTER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TESTER, [illegible]	[illegible]	5,2[illegible]	[illegible]	
[illegible]	TESTER, OSCILLOSCOPE, PROGRAMMABLE	[illegible]	[illegible]	[illegible]	
[illegible]	TESTER, [illegible]	[illegible]	5,004	[illegible]	
[illegible]	TESTER, TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	120
[illegible]	TESTER, TEST SET [illegible]	[illegible]	59,[illegible]	[illegible]	120
[illegible]	TESTER, TEST SET, ELECTRONIC SYSTEM	[illegible]	59,1[illegible]	[illegible]	120
[illegible]	AIR CONDITIONER [illegible] HORIZONTAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] HORIZONTAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] HORIZONTAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] HORIZONTAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] HORIZONTAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] HORIZONTAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]		[illegible]		[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	5,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible] BTU		[illegible]	2,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]		[illegible]	2,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]		[illegible]	2,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	2,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	2,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	2,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	5,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	2,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible]		[illegible]	5,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible] BTU		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible] BTU		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible] BTU		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible] BTU		10,[illegible]	5,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]		[illegible]	5,[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible] BTU		5,[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible] BTU		11,[illegible]	[illegible]	[illegible]

TABLE 401.-EQUIPMENT COST AND LIFE EXPECTANCY DATA (AS OF MAR 1990)

LIN	NAME OF ITEM	MODEL NO	REPLACEMENT COST (DOLS)	STANDARD UNIT COST	LIFE EXPECTANCY
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]	[illegible]	7,590	[illegible]	[illegible]
[illegible]	AIR CONDITIONER [illegible] VERTICAL [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AIR CONDITIONER PCS, SKID MTD		[illegible]	5,0[illegible]	[illegible]
[illegible]	AIR CONDITIONER PCS, SKID MTD		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible] BRIDGE		[illegible]	[illegible]	
[illegible]	BATH [illegible] UNIT [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	BATH UNIT, TRLR MTD	[illegible]	42,[illegible]	5,2[illegible]	[illegible]
[illegible]	BATH UNIT, TRLR MTD	[illegible]	42,[illegible]	[illegible]	
[illegible]	BATH UNIT, TRLR MTD	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	BAY, INTERIOR, RIBBON BRIDGE		[illegible]	[illegible]	
[illegible]	BAY, RAMP, RIBBON BRIDGE		[illegible]	[illegible]	
[illegible]	BOAT, BRIDGE ERECTION	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	BRIDGE ERECTION SET [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	BRIDGE, [illegible]		[illegible]	[illegible]	
[illegible]	BRIDGE, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	BUCKET, CLAMSHELL, 3/4 [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	BUCKET, CLAMSHELL, 3/4 [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	BUCKET, CLAMSHELL, 3/4 YD	[illegible]	[illegible]	[illegible]	
[illegible]	BUCKET, CLAMSHELL, 3/4 [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	BUCKET, CLAMSHELL	[illegible]	[illegible]	7,[illegible]	
[illegible]	BUCKET, CONCRETE HORIZONTAL DISCHARGE [illegible]		[illegible]	[illegible]	
[illegible]	BUCKET, CONCRETE	[illegible]	[illegible]	[illegible]	
[illegible]	BUCKET, GEN PURPOSE, 2 1/2 YD [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	BUCKET, GENERAL PURPOSE, 2 1/2 YD		[illegible]	[illegible]	
[illegible]	COMPACTOR [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	COMPRESSOR, RECIPROCATING POWER DRIVEN, [illegible] CFM		[illegible]	[illegible]	
[illegible]	COMPRESSOR, RECIPROCATING POWER DRIVEN, [illegible] CFM	[illegible]	[illegible]	[illegible]	
[illegible]	COMPRESSOR, RECIPROCATING POWER DRIVEN, [illegible] CFM		[illegible]	[illegible]	
[illegible]	COMPRESSOR, RECIPROCATING POWER DRIVEN, [illegible] CFM		[illegible]	[illegible]	
[illegible]	COMPRESSOR, RECIPROCATING POWER DRIVEN, [illegible] CFM		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	COMPRESSOR AIR [illegible] PNEUMATIC TOOLS	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	CRANE, HIGH SPEED, [illegible]		[illegible]	[illegible]	
[illegible]	CRANE, WHEEL MTD, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	CRANE, WHEEL MTD [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	CRANE, [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	DECONTAMINATING APPARATUS [illegible]	[illegible]	22,[illegible]	[illegible]	
[illegible]	DECONTAMINATING APPARATUS [illegible]	[illegible]	22,[illegible]	[illegible]	
[illegible]	DEMOLITION EQUIP, [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	DEMOLITION EQUIP, [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	DETECTING SET, MINE PORTABLE NONMETALLIC	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	DETECTING SET, MINE PORTABLE		[illegible]	[illegible]	
[illegible]	DETECTING SET, MINE PORTABLE, METALLIC	[illegible]	[illegible]	[illegible]	
[illegible]	DETECTING SET, MINE	[illegible]	[illegible]	[illegible]	
[illegible]	DETECTING SET, MINE	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ELECTRICAL POWER DISTRIBUTION SYSTEM, [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	EXCAVATOR, HYDRAULIC, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	FIELD WIRING HARNESS	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	FLOODLIGHT SET, SKID MTD [illegible]		[illegible]	[illegible]	[illegible]

TABLE 4B1.-EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

LIN	NAME OF ITEM	MODEL NO	REPLACEMENT COST [illegible]	[illegible] UNIT COST	LIFE EXPECTANCY [illegible]
[illegible]	FORKLIFT ATTACHMENT, 10000 LB CAP		[illegible]	9,6[illegible]	[illegible]
[illegible]	FORKLIFT ATTACHMENT, 12,000 LB		5,[illegible]	[illegible]	
[illegible]	[illegible]	M[illegible]	[illegible]	54,[illegible]	4[illegible]
[illegible]	[illegible]	M[illegible]	[illegible]	54,[illegible]	
[illegible]	[illegible]	M[illegible]	[illegible]	[illegible]	
[illegible]	FUEL SYS AMPHIB ASSAULT, [illegible] GAL CAPACITY	M[illegible]	1,[illegible]	3[illegible]	
[illegible]	FUEL SYS AMPHIB ASSULT, 600000 GAL CAPACITY	M[illegible]	1,5[illegible]	3[illegible]	
[illegible]	FUEL SYS AMPHIB ASSULT, 600000 GAL CAP	M[illegible]	1,5[illegible]	3[illegible]	
[illegible]	GENERATOR SET, 3 KW, 60 HZ SKID MTD	MEP 016B	5,[illegible]	[illegible]	15
[illegible]	GENERATOR SET, 3 KW, 60 HZ SKID MTD	MEP 016A	[illegible]	[illegible]	15
[illegible]	GENERATOR SET, 10KW, 60HZ, SKID-MTD	MEP-003A	11,[illegible]	[illegible]	2[illegible]
[illegible]	GENERATOR SET, 10KW, 60HZ, SKID-MTD	[illegible]	11,[illegible]	5,965	
[illegible]	GENERATOR SET, 10 KW, 400HZ, SKID MTD	MEP-112A	11,5[illegible]	5,120	24
[illegible]	GENERATOR SET, 15KW, 60HZ, SKID-MTD	MEP-004A	19,425	7,060	24
[illegible]	GENERATOR SET, 30KW, 60HZ, SKID MTD	[illegible]	19,425	5,905	2[illegible]
[illegible]	GENERATOR SET, 60KW, 60HZ, SKID MTD	[illegible]	19,525	7,1[illegible]	2[illegible]
[illegible]	GENERATOR SET, 30KW, 400HZ, SKID MTD	MEP 114A	20,[illegible]	71,237	2[illegible]
[illegible]	GENERATOR SET, 60KW, 400HZ SKID MTD	MEP 115A	22,[illegible]	72,767	2[illegible]
[illegible]	GENERATOR SET, [illegible]	[illegible]	[illegible]	4,[illegible]	
[illegible]	GENERATOR SET, [illegible]	MEP-[illegible]	[illegible]	29,0[illegible]	24
[illegible]	GENERATOR SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	GENERATOR SET, [illegible] SKID MTD	MEP-[illegible]	4[illegible]	[illegible],257	
[illegible]	GENERATOR SET, [illegible] SKID MTD	MEP-007B	42,931	55,364	
[illegible]	GENERATOR SET, [illegible] TACTICAL UTILITY	MEP 009A	[illegible]	19,[illegible]	7
[illegible]	GRADER, ROAD, MOTORIZED	120G	72,735	22,718	43
[illegible]	GRADER, ROAD, MOTORIZED	120[illegible]	[illegible]	4[illegible]	[illegible]
[illegible]	[illegible] SYSTEM		54,[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		2,[illegible]	[illegible]	
[illegible]	ICE CREAM PLANT [illegible]	M[illegible]	16,5[illegible]	2,482	
[illegible]	ICE CREAM PLANT [illegible]	M 29	16,[illegible]	2,482	
[illegible]	ICE CREAM PLANT		11,527		
[illegible]	ICE MAKING MACHINE, FLAKE	[illegible]	[illegible]	7,757	
[illegible]	ICE MAKING MACHINE, FLAKE	[illegible]	7,[illegible]	[illegible]	
[illegible]	ICE MAKING MACHINE, FLAKE	[illegible]	7,[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	LAUNDRY UNIT, [illegible]	[illegible]	[illegible]	12,[illegible]	
[illegible]	LAUNDRY UNIT, FIELD	[illegible]	36,[illegible]	[illegible]	3[illegible]
[illegible]	[illegible] DECONTAMINATING SYSTEM	M1[illegible]	14,[illegible]	12,[illegible]	120
[illegible]	[illegible]	[illegible]	[illegible]	7,[illegible]	[illegible]
[illegible]	MAPPING SET, TOPOGRAPHIC, TRAILER MOUNTED		[illegible]	172,428	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	PETROLEUM TESTING KIT		6,[illegible]	[illegible]	
[illegible]	PETROLEUM TESTING KIT		6,5[illegible]	[illegible]	
[illegible]	PHOTO INTERPRETATION SET, TEAM		[illegible]	[illegible]	
[illegible]	PHOTO INTERPRETATION SET, UNIT		[illegible]	5,5[illegible]	
[illegible]	[illegible]	[illegible]	1,5[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		1,[illegible]	[illegible]	
[illegible]	PUMP ASSEMBLY, EXPEDIENT REFUELER, FUEL DISPENSING	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	PUMP ASSEMBLY, EXPEDIENT REFUELER, 100 GPM	[illegible]	[illegible]	9[illegible]	[illegible]
[illegible]	PUMP ASSEMBLY, EXPEDIENT REFUELER, FUEL DISPENSING	[illegible]	5,[illegible]	[illegible]	[illegible]
[illegible]	PUMP ASSEMBLY, [illegible], REFUELER, 50 GPM [illegible]		[illegible]	[illegible]	
[illegible]	PUMP MODULE, [illegible]		52,[illegible]	27,[illegible]	[illegible]
[illegible]	PUMP, [illegible]		[illegible]	5,[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	9,[illegible]	5,[illegible]	[illegible]

TABLE 401.-EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

LIN	NAME OF ITEM	MODEL NO	REPLACEMENT COST (1990$)	STANDARD UNIT COST	LIFE EXPECTANCY
[illegible]	PUMP RECIPROCATING, MANUAL [illegible]	[illegible]	9,167	2,895	
[illegible]	PUMP SET, 65 GPM, 50 FT HEAD		5,405	2,590	
[illegible]	PUMP SET, 65 GPM, 50 FT HEAD		5,405	2,590	
[illegible]	REFRIGERATION UNIT, [illegible] BOX		6,424	5,700	
[illegible]	REFRIGERATION UNIT, [illegible] CU FT [illegible]	[illegible]	2,442	[illegible]	
[illegible]	REFRIGERATION UNIT, [illegible] CU FT [illegible]	[illegible]	1,412	[illegible]	
[illegible]	REFRIGERATOR, [illegible]		9,8[illegible]	12,5[illegible]	
[illegible]	[illegible]		182,5[illegible]	[illegible]	50
[illegible]	[illegible] ATTACHMENT, [illegible]	[illegible]	21,163	15,120	12
[illegible]	ROLLER, COMPACTOR, VIBRATORY	[illegible]	154,722	95,925	25
[illegible]	SCRAPER TRACTOR, WHEELED	[illegible]	149,0[illegible]	123,000	25
[illegible]	SHOP EQUIPMENT, CONSTRUCTION #1		5,50[illegible]	4,250	50
[illegible]	SHOP EQUIPMENT CONSTRUCTION #2		6,057	4,55[illegible]	50
[illegible]	SHOP EQUIPMENT, CONSTRUCTION #3		9,057	7,000	50
[illegible]	SHOP EQUIP, CONTACT MAINT, TRUCK MTD SET #2	[illegible]	32,904	25,000	15
[illegible]	[illegible]	[illegible]	236,302	193,290	20
[illegible]	[illegible]	[illegible]	3,703	2,525	3
[illegible]	[illegible]	[illegible]	6,562	4,275	3
[illegible]	[illegible]	[illegible]	3,333	2,295	7
[illegible]	[illegible]		9,1[illegible]	[illegible]	25
[illegible]	[illegible]	[illegible]	7,3[illegible]	5,100	20
[illegible]	SURVEY SET, [illegible]		338,105	96,810	50
[illegible]	SURVEY EQUIPMENT SET, CONSTRUCTION UNIT		59,425	50,000	50
[illegible]	[illegible]		335,56[illegible]	215,000	50
[illegible]	TACTICAL INTELLIGENCE [illegible]		5,625	[illegible]	15
[illegible]	SWEEPER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TANK, FABRIC, COLLAPSIBLE, [illegible]		[illegible]	1,490	5
[illegible]	TANK, FABRIC, COLLAPSIBLE, [illegible]		3,252	500	[illegible]
[illegible]	[illegible]		3,292	2,500	
[illegible]	TOOL KIT, [illegible]		[illegible]	[illegible]	
[illegible]	TRACTOR, FULL TRACKED, [illegible]	[illegible]	53,219	[illegible]	25
[illegible]	TRACTOR, MEDIUM, FULL TRACKED	[illegible] CATERPILLAR	126,643	94,730	25
[illegible]	TRACTOR, FULL TRACKED [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRACTOR, [illegible], ARTICULATED STEER	[illegible]	[illegible]	[illegible]	12
[illegible]	[illegible]	[illegible]	120,075	95,010	
[illegible]	[illegible]	[illegible]	129,022	[illegible]	30
[illegible]	[illegible]	[illegible]	129,027	[illegible]	
[illegible]	TRACTOR, ALL WHEEL DRIVE [illegible]	[illegible]	[illegible]	[illegible]	15
[illegible]	TRUCK, [illegible]	[illegible]	77,525	27,590	
[illegible]	TRUCK, [illegible]	[illegible]	32,471	[illegible]	12
[illegible]	TRUCK, [illegible]	[illegible]	37,443	23,329	
[illegible]	TRUCK, [illegible]	[illegible]	97,217	71,100	15
[illegible]	TRACTOR, [illegible] ARTICULATED STEER	[illegible]	[illegible]	[illegible]	
[illegible]	WATER PURIFICATION SET		[illegible]	[illegible]	40
[illegible]	WATER PURIFICATION UNIT [illegible]		[illegible]	[illegible]	15
[illegible]	WATER QUALITY ANAL KIT		[illegible]	2,365	
[illegible]	WATER [illegible] SYSTEM		[illegible]	[illegible]	
[illegible]	WELDING MACHINE, ARC, TRAILER MTD	[illegible]	20,165	[illegible]	
[illegible]	WINCH ATTACHMENT, SINGLE DRUM	[illegible] CATERPILLAR	[illegible]	5,755	
[illegible]	ALARM CHEMICAL AGENT, AUTO, PORTABLE, [illegible]	[illegible]	2,795	1,432	60
[illegible]	[illegible]		10,525	12,904	
[illegible]	[illegible]	[illegible]	175,072	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	9
[illegible]	[illegible]		[illegible]		

TABLE 4B1.-EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

TAMCN	NAME OF ITEM	MODEL NO	REPLACEMENT COST	STANDARD UNIT COST	LIFE EXPECTANCY
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 4B1.-EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

LIN	NAME OF ITEM	MODEL NO	REPLACEMENT COST (FY90)	STANDBY [illegible]	LIFE [illegible] (YRS)
[illegible]	SHOP SET, AUTOMOTIVE SUPPL #2, FM		147,[illegible]	[illegible]	
[illegible]	TESTER, FUEL INJECTOR PUMP 230 VOLTS [illegible]		45,354	[illegible]	
[illegible]	TRAILER, [illegible] CARGO, [illegible]	[illegible]	7,[illegible]	177	
[illegible]	TRAILER, CARGO [illegible]	[illegible]	7,[illegible]	[illegible]	
[illegible]	TRAILER, CARGO, [illegible] 2 WHL,	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	6,455	42
[illegible]	TRUCK, WRECKER, [illegible]	[illegible]	54,[illegible]	59,525	23
[illegible]	TRUCK, POWERED, [illegible]	[illegible]	142,[illegible]	[illegible]	43
[illegible]	TRUCK, POWERED, [illegible]	[illegible]	75,[illegible]	[illegible]	41
[illegible]	TRUCK, POWERED, [illegible] CARGO [illegible]	[illegible]	107,[illegible]	78,[illegible]	53
[illegible]	[illegible]	[illegible]	5,[illegible]	4,[illegible]	
[illegible]	TRAILER, TANK, WATER [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	74,415	20.577	
[illegible]	[illegible]	[illegible]	52,415	[illegible]	45
[illegible]	[illegible]	[illegible]	27,[illegible]	20.555	45
[illegible]	TRUCK, CARGO [illegible] TON DIESEL [illegible]	[illegible]	18,231	[illegible]	
[illegible]	TRUCK, UTILITY [illegible]	[illegible]	17,907	[illegible]	
[illegible]	TRUCK, CARGO, 5 [illegible]	[illegible]	[illegible]	[illegible]	45
[illegible]	TRUCK, CARGO, 5T, [illegible] DROPSIDE [illegible]	[illegible]	57,[illegible]	47.525	
[illegible]	TRUCK, CARGO DROPSIDE, 5T [illegible]	[illegible]	57,[illegible]	[illegible]	
[illegible]	TRUCK, CARGO DROPSIDE, 5T [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, CARGO 5T [illegible]	[illegible]	[illegible]	[illegible]	45
[illegible]	TRUCK, [illegible] 5 [illegible]	[illegible]	[illegible]	[illegible]	45
[illegible]	TRUCK, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, AIRCRAFT [illegible]	[illegible]	177,[illegible]	[illegible]	[illegible]
[illegible]	TRUCK, DUMP, 5 [illegible]	[illegible]	111,[illegible]	[illegible]	[illegible]
[illegible]	TRUCK, [illegible] 5 [illegible]	[illegible]	114,[illegible]	67,223	
[illegible]	TRUCK, FIREFIGHTING, [illegible]	[illegible]	75,[illegible]	[illegible]	45
[illegible]	TRUCK, FIREFIGHTING, CRASH	[illegible]	105,[illegible]	30,5[illegible]	
[illegible]	TRUCK, FIREFIGHTING, [illegible]	[illegible]	113,[illegible]	[illegible]	
[illegible]	TRUCK, [illegible] 2 1/2 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TRUCK, SHELTER [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, TANK FUEL SERVICING [illegible] GAL [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, TANK FUEL SERVICING [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, TANK, WATER [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRK [illegible] CARRIER, [illegible] 1 1/4 TON [illegible]	[illegible]	32,917	[illegible]	[illegible]
[illegible]	TRK UTILITY, TOW CARR, [illegible] 1 1/4 TON [illegible]	[illegible]	32,917	[illegible]	
[illegible]	TRUCK, TRACTOR [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TRUCK, TRACTOR 5 TON	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TRK UTILITY [illegible] CARGO [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TRK UTILITY [illegible] CARGO [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TRK, UTILITY, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TRK UTILITY [illegible] 1 1/4 TON [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, UTILITY, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TRUCK [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRUCK, [illegible] 5T [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TRUCK, WRECKER, 5 TON	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ADAPTER [illegible] TEST [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	APPLICATION PROGRAM SET, [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	AREA RESERVOIR ASSEMBLY [illegible]		[illegible]	[illegible]	

TABLE 4-11.—EQUIPMENT COST AND LIFE EXPECTANCY DATA (AS OF MAR 1990)

LIN	NAME OF ITEM	MODEL NO	ACQUISITION COST (FY91)	STANDARD UNIT COST	LIFE EXPECTANCY (YEARS)
[illegible]	[illegible]	[illegible]	25,[illegible]	20,000	22
[illegible]	[illegible]	[illegible]	55,[illegible]	55,526	20
[illegible]	[illegible]	M-15	[illegible]	125	
[illegible]	[illegible]	M5	5,532	5,876	20
[illegible]	BOTTLE CLEANING/CHARGING STATION (BCCS)	[illegible]	412,[illegible]	170,000	12
[illegible]	BRIDGE, SCISSOR FOR AVLB		152,[illegible]	70,115	40
[illegible]	BRIDGE, ARMORED VEHICLE LAUNCHED	[illegible]	145,[illegible]	127,105	50
[illegible]	[illegible]	[illegible]	143,325	127,000	
[illegible]	[illegible]	[illegible]	143,325	127,000	
[illegible]	CARBINE, 5.56MM	M4	645	575	[illegible]
[illegible]	CHARGER, BATTERY [illegible]	[illegible]	12,675	11,[illegible]	
[illegible]	CHARGER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	CHARGER, BATTERY	[illegible]	[illegible]	[illegible]	
[illegible]	CIRCLE, AIMING	M2A2	[illegible]	[illegible]	[illegible]
[illegible]	COLLIMATOR, INFINITY AIMING, REFERENCE	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	10,000	[illegible]
[illegible]	DATA DISPLAY GROUP [illegible]		[illegible]	10,[illegible]	[illegible]
[illegible]	DATA DISPLAY GROUP [illegible]		[illegible]	11,[illegible]	[illegible]
[illegible]	EQUIPMENT SET, NIGHT VISION	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	11,[illegible]	[illegible]
[illegible]	FIXTURE, CROSS LEVEL AND ELEVATION, [illegible]		[illegible]	11,[illegible]	
[illegible]	[illegible] BATTERY CONTROL CENTRAL [illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	HOWITZER, LT TOWED, 105MM, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	HOWITZER, MEDIUM, SP, 155MM	[illegible]	1,[illegible]	132,[illegible]	[illegible]
[illegible]	HOWITZER, MEDIUM, SP, 155MM, [illegible]	[illegible]	1,[illegible]	125,[illegible]	
[illegible]	HOWITZER, MEDIUM, SP, [illegible]	[illegible]	1,[illegible]	132,[illegible]	
[illegible]	HOWITZER, MEDIUM, TOWED 155MM, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	HOWITZER, TOWED, 155MM, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	HOWITZER, HEAVY, SP, 8 IN.	[illegible]	1,[illegible]	[illegible]	[illegible]
[illegible]	HOWITZER, HEAVY, SP, 8 IN.	[illegible]	1,[illegible]	[illegible]	
[illegible]	HOWITZER, HEAVY SP, 8 IN.	[illegible]	[illegible]	[illegible]	
[illegible]	IMPROVED PLATOON COMMAND POST [illegible]	[illegible]	[illegible]		
[illegible]	INFORMATION COORDINATION CENTRAL [illegible]	[illegible]	1,[illegible]	[illegible]	
[illegible]	INTERROGATOR SET [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	INTERROGATOR SET, PROGRAMMER [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	INTERROGATOR SET, PROGRAMMER [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	INTERROGATOR SET, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	INTERROGATOR SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	ASSAULT AMPHIBIOUS VEHICLE, COMMAND	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ASSAULT AMPHIBIOUS VEHICLE, PERSONNEL	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	ASSAULT AMPHIBIOUS VEHICLE, RECOVERY	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	LASER, INFRARED OBSERVATION SET	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	LAUNCHER, GRENADE [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	LAUNCHER [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	LAUNCH SIMULATION SET, [illegible]		[illegible]	[illegible]	
[illegible]	LAUNCH SIMULATION, STINGER		[illegible]	[illegible]	
[illegible]	LAUNCHER, TUBULAR, TOW WEAPON SYSTEM	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	LAUNCHER, TUBULAR, TOW WEAPON SYSTEM	[illegible]	[illegible]		[illegible]
[illegible]	LAV AIR DEFENSE	[illegible]	[illegible]	[illegible]	

TABLE 4B1.-EQUIPMENT COST AND LIFE EXPECTANCY DATA
(AS OF MAR 1990)

TAMCN	NAME OF ITEM	MODEL NO	REPLACEMENT COST (TOTAL)	STANDARD UNIT COST	LIFE EXPECTANCY (YRS)
[illegible]	LAUNCHER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	LAV ANTI TANK		[illegible]	[illegible]	
[illegible]	LAV ASSAULT GUN		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	LAV COMMAND AND CONTROL [illegible]		[illegible]	[illegible]	
[illegible]	LAV [illegible] 25MM		[illegible]	[illegible]	
[illegible]	LAV LOGISTICS		[illegible]	[illegible]	
[illegible]	LAV MORTAR		[illegible]	[illegible]	
[illegible]	LAV MAINTENANCE/RECOVERY		[illegible]	[illegible]	
[illegible]	LOCATOR, GRENADES, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MACHINE GUN, LIGHT, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MACHINE GUN, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MACHINE GUN, [illegible]		[illegible]	[illegible]	
[illegible]	MACHINE GUN, 7.62MM [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MACHINE GUN, 7.62MM [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MACHINE GUN, CAL .50 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MACHINE GUN [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MACHINE GUN [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MACHINE GUN, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MACHINE GUN, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MACHINE GUN [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	METEOROLOGICAL STATION [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	METEOROLOGICAL STATION	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	METEOROLOGICAL STATION [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] SET, [illegible], TRAINING	[illegible]	[illegible]	[illegible]	
[illegible]	MORTAR, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	MORTAR [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MORTAR [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MORTAR, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	MORTAR, MEDIUM EXTENDED RANGE		[illegible]	[illegible]	
[illegible]	NIGHT VISION [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	NIGHT VISION SIGHT, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	NIGHT VISION SIGHT, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	NIGHT VISION SIGHT, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	NIGHT VISION SIGHT, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	PERISCOPE, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	PISTOL, AUTO., CAL .45	[illegible]	[illegible]	[illegible]	
[illegible]	POSITION [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	PRESS, [illegible]	[illegible]	[illegible]		
[illegible]	RADAR SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	RADAR SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	RADAR SET [illegible]	[illegible]	[illegible]		
[illegible]	RADAR SET [illegible]	[illegible]	[illegible]		
[illegible]	RADAR SET, [illegible]	[illegible]	[illegible]	[illegible]	

TABLE 4B1.-EQUIPMENT COST AND LIFE EXPECTANCY DATA (AS OF MAR 1990)

[illegible]	NAME OF ITEM	MODEL NO	[illegible] COST	[illegible] COST	LIFE [illegible] (MOS)
[illegible]	RADIOGRAPHIC BASELINE CHECK SET	[illegible]	5,967	1,590	[illegible]
[illegible]	RADIOGRAPHIC BASELINE CHECK SET	[illegible]	5,967	1,590	
[illegible]	RADIOGRAPHIC RECORDER	[illegible]	7,276	[illegible]	[illegible]
[illegible]	RADIOGRAPHIC RECORDER	[illegible]	[illegible]	[illegible]	
[illegible]	RAMP, LOADING [illegible], TRANSPORTER [illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	RECOVERY VEHICLE FULL TRACKED LIGHT	[illegible]	[illegible]	100,000	
[illegible]	RECOVERY VEHICLE, FULL TRACKED, [illegible]	[illegible]	[illegible]	[illegible]	30
[illegible]	REGULATOR, CHARGING ACCUMULATOR		[illegible]	[illegible]	
[illegible]	REMOTELY OPERATED [illegible] AND [illegible]		[illegible]	[illegible]	
[illegible]	REVOLVER, CAL [illegible]		[illegible]	[illegible]	
[illegible]	REVOLVER, CAL [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	REVOLVER, [illegible]	[illegible]	[illegible]		
[illegible]	REVOLVER, [illegible]	[illegible]	125	[illegible]	
[illegible]	RIFLE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RIFLE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	RIFLE, SNIPER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	RIFLE, SNIPER, [illegible]	[illegible]	[illegible]		
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	SHOTGUN, 12 GAUGE	[illegible]	655	[illegible]	
[illegible]	SHOTGUN, 12 GAUGE, [illegible]	[illegible]	655	[illegible]	
[illegible]	SHOTGUN, 12 GAUGE	[illegible]	655	[illegible]	
[illegible]	[illegible] STATION, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	12
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET MISSILE [illegible]	[illegible]	[illegible]	[illegible]	12
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET [illegible]	[illegible]	[illegible]	[illegible]	

TABLE 4D1.—EQUIPMENT COST AND LIFE EXPECTANCY DATA (AS OF MAR 1990)

LIN	NAME OF ITEM	MODEL NO	REPLACEMENT UNIT COST	% ANNUAL UPKEEP COST	LIFE EXPECT.(MOS)
[illegible]	TEST SET, GUIDED MISSILE [illegible]	AN/TSM-[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET, [illegible]	AN/TSM-[illegible]	[illegible]	[illegible]	
[illegible]	TEST SET, [illegible]	TS-3020,[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TEST STAND, POWER PLANT	[illegible]	23,1[illegible]	[illegible]	[illegible]
[illegible]	TEST SET, NIGHT VISION SIGHT	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	TOOL KIT, [illegible] SMALL MISSILE [illegible]		[illegible]	[illegible]	[illegible]
[illegible]	TOOL KIT, [illegible]		5,[illegible]	[illegible]	[illegible]
[illegible]	TOOL KIT, [illegible]	[illegible] SERIES	2,[illegible]	[illegible]	
[illegible]	TOOL KIT, [illegible]		4,[illegible]	[illegible]	
[illegible]	TOOL KIT, [illegible]		[illegible]	[illegible]	
[illegible]	TOOL KIT, [illegible]	[illegible]	[illegible]	[illegible]	6
[illegible]	TOOL KIT, MAINT [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TOOL KIT, MAINT, TV, [illegible]	[illegible]	5,11[illegible]	2,21[illegible]	
[illegible]	TOOL KIT, MAINT, TV, [illegible]	[illegible]	6,[illegible]	2,0[illegible]	
[illegible]	TOOL KIT, [illegible]	[illegible]	2,[illegible]	1,7[illegible]	
[illegible]	TOOL KIT, [illegible]	[illegible]	[illegible]	1,0[illegible]	
[illegible]	TOOL KIT, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	4,2[illegible]	[illegible]
[illegible]	TOOL SET	[illegible]	[illegible]	2,[illegible]	[illegible]
[illegible]	TOOL SET	[illegible]	[illegible]	27[illegible]	[illegible]
[illegible]	TOOL SET	[illegible]	1,[illegible]	1,25[illegible]	[illegible]
[illegible]	TOOL KIT, [illegible]		8,[illegible]	5,[illegible]	[illegible]
[illegible]	TOOL SET, [illegible]	[illegible]	2,[illegible]	[illegible]	
[illegible]	TOOL SET, [illegible]	[illegible]	[illegible]		
[illegible]	TOOL SET, [illegible]	[illegible]	1,[illegible]		
[illegible]	TOOL SET, [illegible]	[illegible]	[illegible]		
[illegible]	TOOL SET, SPECIAL FIELD MAINT.,[illegible]	[illegible]	[illegible]	1,[illegible]	
[illegible]	TOOL SET, SPECIAL, FIELD MAINT., [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TOOL SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TOOL SET, [illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	2,[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TOOL SET, [illegible]		[illegible]		
[illegible]	TOOL SET, [illegible]		[illegible]	1,2[illegible]	
[illegible]	TRAINER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRAILER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRAILER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRAILER, [illegible] SYSTEM	[illegible]	[illegible]	[illegible]	
[illegible]	TRAILER, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRAINING SET, [illegible] SYSTEM [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRAINING SET, [illegible] SYSTEM [illegible]		[illegible]	[illegible]	
[illegible]	TRAINING SET, GUIDED MISSILE [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	TRANSMITTING SET, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible] STATION [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] MAINTENANCE, [illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

TABLE [illegible]. -- POL COSTS 1/
(as of 1 Oct 91)

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible], [illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible], [illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible], [illegible] & [illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible], [illegible], [illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]

1/ Table contains high-usage POL's. Prices are representative of the respective general types of POL.

2/ NAVMC 1017, TAM, U.S.M.C., chapter 23 provides the fuel consumption rate for each major end item. It also lists factors for use in estimated requirements for oils and Lubricants.

3/ Aircraft fuels and Lubricants are funded by the Navy. Data is included for purpose of general information and enhancing cost consciousness.

Data Source: Navy Petroleum Office, Alexandria, Va.

OPR: CMC (LCS) Phone (703) 696-1037, AUTOVON 226-1037

4300. INTRODUCTION

1. Military construction (MILCON) costs listed in this section are those normally associated with the acquisition or construction of new real property facilities under the annual MILCON program.

2. The tables in this section contain construction costs of typical size facilities, a graph for use in determining cost indexes for facilities whose size is different than the typical size shown in the tables in this section, and a table with cost indexes for various cities in the United States with Marine facilities.

3. This section is designed to assist in preliminary cost estimation. Use of these tables provides a rough estimate of MILCON project costs. These tables are not intended to replace the judgment of the experienced estimator, engineer, architect, or contractor. Nor are they intended to be used as a substitute for experience and basic responsibilities of the user.

4301. DATA USE

1. The tables contained herein must be used in conjunction with each other to arrive at estimated construction costs. For example, if a new enlisted club was being considered for FY90 at Marine Corps Air Station (MCAS) Yuma, AZ, the following computation steps should be taken:

a. Determine the desired floor space.

b. Divide the desired floor space figure by the number in Table 4C1 which represents the typical size of that type facility to arrive at a quotient.

c. Locate the quotient on the AREA RELATIONSHIP scale of Table 4C2 and trace vertically to the FACTOR LINE. Then, trace the point of intersection horizontally to the Cost Relationship scale to obtain a resultant cost index.

d. Multiply the cost index by the facility FY90 unit cost given in Table 4C1 to obtain an adjusted value.

e. Multiply the preceding figure by the construction cost index for Yuma AZ, given in Table 4C3, which is 1.19. The product represents the adjusted cost per foot of construction.

f. Multiply the adjusted cost per square foot by the number of square feet in the proposed structure, to obtain the estimated construction cost.

2. The reader is cautioned that data derived from this section of the Manual is for general planning purposes only. It is intended only to enable the planner to evaluate various potential courses of action from a gross dollar standpoint and to narrow the options under consideration to a realistic number. To get finite costs on a given project, a detailed cost estimate from representatives of the Naval Facilities Engineering Command would be required.

Table 4C1. - CONSTRUCTION UNIT COSTS /1
(as of Mar 1988)

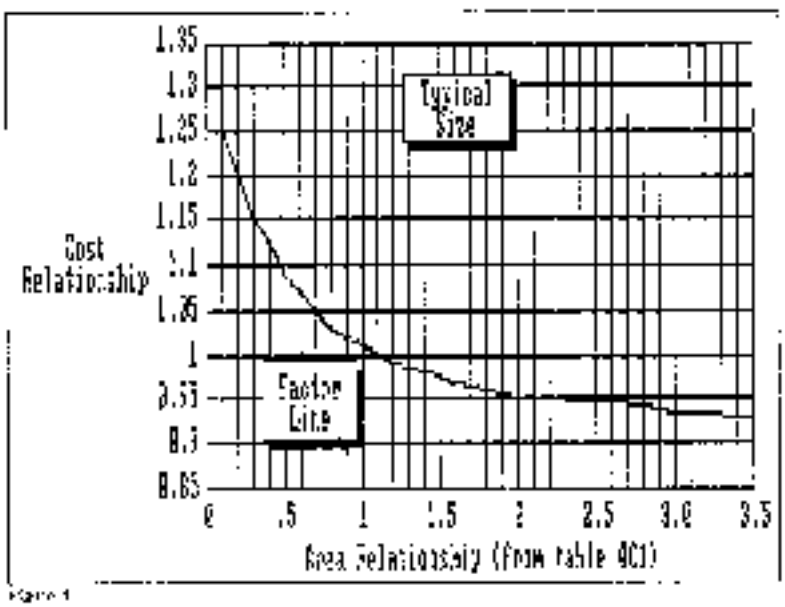
TYPE FACILITY	TYPICAL SIZE (SQ.FT)	UNIT COSTS ($) (PER SQ FT) FY90	FY91
APPLIED INSTRUCTION BUILDING	35000	76	78
ADMINISTRATIVE FACILITY (A)	25000	82	84
BARRACKS, ENLISTED	40000	72	74
BACHELOR OFFICER QUARTERS	44000	74	76
ENLISTED SERVICE CLUBS	16000	114	117
COMMISSARY	67000	93	95
DINING FACILITY/MESS HALL	16000	157	161
EXCHANGE	12000	81	83
FAMILY HOUSING	-	51	52
PHYSICAL FITNESS TRAINING CENTER	20000	90	92
RESERVE TRAINING CTR	23000	75	77
SHOP			
VEHICLE MAINTENANCE (WHEELED)	30000	82	84
VEHICLE MAINTENANCE (TRACKED)	25000	86	88
INSTALLATIONS MAINTENANCE	31000	84	86

WAREHOUSE (GENERAL PURPOSE)	40000	41	42

1/ This table should be used in conjunction with Tables 4C2 and 4C3. Cost are for FY90 and 91.

Data Source: DoD Military Construction Cost Review Guide for FY90 and 91.

OPR: CMC (LFL) Phone (703) 696-1001, AUTOVON 226-1001



1/ Determine the area relationship of the proposed building by deciding the building's area by the typical size of that type of facility as shown in the preceding table; locate the quotient on the Area Relationship scale and trace vertically to the Factor Line, then trace horizontally to the Cost Relationship scale. The resultant value is then multiplied by the unit cost in the preceding table; and factored by the construction cost index in the following table to determine the adjusted unit cost for the proposed building. See paragraph 4402 for an example and further explanation.

Data Source: DoD Military Construction Cost Review Guide for FY90 and 91.

OPR: CMC (LFL) Phone (202) 696-1001/AUTOVON 226-1001

Table 4C3. - CONSTRUCTION COST INDEXES/1
(as of Mar 1988)

ACTIVITY AREA	INDEX
YUMA ARIZONA	1.19
BARSTOW CALIFORNIA	1.20
BRIDGEPORT CALIFORNIA	1.24
EL TORO CALIFORNIA	1.19
CAMP PENDLETON CALIFORNIA	1.12
SAN DIEGO CALIFORNIA	1.21
TWENTYNINE PALMS CALIFORNIA	1.25
ALBANY GEORGIA	0.85
KANEOHE BAY HAWAII	1.44
CAMP SMITH HAWAII	1.39
CHERRY POINT NORTH CAROLINA	0.96
CAMP LEJEUNE NORTH CAROLINA	0.92
PARRIS ISLAND SOUTH CAROLINA	0.93
NORFOLK VIRGINIA	0.92
QUANTICO VIRGINIA	0.96
WASHINGTON D.C.	1.04
IWAKUNI JAPAN	1.58
CAMP BUTLER OKINAWA	1.68

1/ This table should be used in conjunction with Tables 4C1 and 4C2.

Data Source: DoD Military Construction Cost Review Guide for FY 90 and 91.

OPR: CMC (LFL), Phone (703) 696-1001, AUTOVON 226-1001

CHAPTER 4

LOGISTICS

SECTION D: TRANSPORTATION

4400. INTRODUCTION

1. The transportation costs listed in this section are those associated with the moving of personnel or materiel from one geographic location to another. The rates shown here are for the basic service of transporting; additional charges for special handling, preparation, etc., are annotated where appropriate.

2. The modes of transportation for which published rates can be provided are chartered aircraft and surface shipping.

3. Tables 4D1 through 4D11 should be used when the origin and destination of a trip is known and a precise estimate of transportation costs is desired. For current railroad, truck, or chartered bus rates, the local transportation management office should be contacted. Table 4D12 may be used when the origin and destination of a trip are unknown or not included in the tables.

4401. DATA USE. Transportation cost can be used in estimation of expenses expected to be incurred in the transporting of personnel materiel. In shipping materiel, information in MCO 4610.35C, Standard Characteristics and Airlift Certification for Marine Corps Equipment, should be used in conjunction with these tables to determine equipment size and weight.

Table 401. - MILITARY AIRLIFT COMMAND (MAC)
CHANNEL RATES (PERSONNEL)
(Per passenger as of Jan 1990)

TO:	EAST COAST	WEST COAST	JAPAN	JAPAN OKINAWA	WEST GERMANY	KOREA
FROM:						
EAST COAST[1]	N/A	190	344[1]	748[4]	1112	721 KOREA[4] 718 TAIPEI 717 OSAN
WEST COAST	99[2]	N/A	142	699	531	571 SEOUL 561 TAIPEI 548 OSAN
HAWAII	344	215	N/A	419	675	404 OSAN
YATAK CALIFORNIA	720[4]	469	413	N/A	1044	52 CARGO 27 [illegible]
WEST GERMANY	417	531	572[3]	1000	N/A	99 TUNIS 1126 TAIPEI [illegible] OSAN
KOREA TAIPEI	1.6	561	415	92	1122	N/A
SEOUL	722	561	415	93	1199	N/A
OSAN	717	[illegible]	[illegible]	76	1169	N/A

(1) Camp Lejeune, N.C. (Jacksonville, N.C. airport) used as east coast origin point.

- No MAC, commercial only.

(3) Commercial from east coast to Hawaii.

(4) Combination commercial and MAC. Commercial within CONUS, MAC for overseas travel, including St. Louis APOE. Cost to Okinawa is $718 via Los Angeles--YCA (coach contract air) fare from Jacksonville to Washington D.C, YDG (coach discount government) from Washington D.C. to Los Angeles and MAC from Los Angeles to Okinawa.

Data Source: MAC Tariff AFR 6-11 dated 2 Aug 89

OPR: CMC (LFT), Phone (703) 696-0855/AUTOVON 226-0855

Table 402. - MILITARY RECLIFE CONTRACT (MAC) CHARTER RATES (CONUS)
(Cents per passenger as of 1 Oct 1989)

FS:	EAST COAST (JFK):	WEST COAST (LAX):	TEXAS	ANCHO (ANC):	HAWAII (HNL)	UPR CLASS (FCIR)	KOREA
[illegible]							
EAST COAST							
[illegible]	N/A	N/A	N/A	N/A	[illegible]	[illegible]	[illegible]
WEST COAST							
[illegible]	N/A	N/A	N/A	N/A	[illegible]	N/A	N/A
[illegible]	N/A	N/A	N/A	[illegible]	N/A	[illegible]	N/A
[illegible]	N/A	N/A	N/A	N/A	N/A	N/A	[illegible]
HAWAII							
[illegible]	N/A	N/A	N/A	N/A	[illegible]	N/A	[illegible] (CONUS)
JAPAN							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	N/A	N/A	[illegible] (CONUS) [illegible] (CONUS)
WEST CENTRAL							
[illegible]	[illegible]	N/A	[illegible]	N/A	N/A	N/A	N/A
COREA							
[illegible]	[illegible]	N/A	[illegible]	[illegible]	[illegible]	N/A	N/A
[illegible]	N/A	N/A	N/A	N/A	[illegible]	N/A	N/A
[illegible]	N/A	N/A	N/A	N/A	[illegible]	N/A	[illegible] (CONUS)

[illegible]

[illegible] CMC (LFT), Phone (703)696-0855/AUTOVON 266-0855

Data Source: MAC Tariff AFR 76-11 dated 1 Oct 89

OPR: CMC (LFT), Phone (703)696-0855/AUTOVON 266-0855

Table 603.- MILITARY AIRLIFT COMMAND (MAC)
SPECIAL ASSIGNMENT AIRLIFT MISSION (SAAM) RATES 1/ 2/

FROM 3/ EL PASO TO:	TYPE AIRCRAFT			FROM 3/ [illegible] TO:	TYPE AIRCRAFT		
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]

1/ The top figure represents a one-way flight with the aircraft returning to its basing point. The bottom rate represents a round trip flight with the aircraft to its basing point after completion of the mission.

2/ SAAM flights are designed to satisfy special, specific requirements which cannot be adequately accommodated by scheduled MAC channel flights or commercial flights.

3/ The basing point which is geographically the closest to the point of origin is used in determining the rates.

Data Source: MAC Tariff AFR 76-11 dated 2 August 1989

OPR: CMC (LFT) Phone (703) 696-0855, AUTOVON 226-0855

Table 404. - MILITARY SEALIFT COMMAND (MSC) HAUSS (AMMO/HAZARDOUS CARGO)
($ per measurement ton [40 cu. ft.] as of Oct 1989)

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Refers to intracoastal shipments, regardless of length.

Data Source: COMSC Inst. 7600.8H dated 26 May 1989

OPR: CMC (LFT), Phone (703) 696-0855, AUTOVON 226-0855

Table 405. - MILITARY SEALIFT COMMAND (MSC) HULS (BULKER CARGO)
($ per measurement ton [40 cu. ft.] as of Oct 1989)

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Refers to intracoastal shipments, regardless of length.

Data Source: COMSC Inst. 7600.8H dated 26 May 1989

OPR: CMC (LFT), Phone (703) 696-0855, AUTOVON 226-0855

TABLE 406. - MILITARY SEALIFT COMMAND (MSC) RATES (PRIVATELY OWNED VEHICLES)
($ per measurement ton (40 cu. ft.) as of Oct 1989)

TO: / FROM:	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible][1]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible][1]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Refers to intracoastal shipments, regardless of length.

Data Source: COMSC Inst. 7600.8H dated 26 May 1989

OPR: CMC (LFT), Phone (703) 696-0855, AUTOVON 226-0855

TABLE 411. - MILITARY SEALIFT COMMAND (MSC) RATES (CARGO CARRYING TRAFFICK)
($ per measurement ton (40 cu. ft.) as of Oct 1989)

TO: / FROM:	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible][1]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Refers to intracoastal shipments, regardless of Length.

Data Source: COMSC Inst. 7600.8H dated 26 May 1989

OPR: CMC (LFT), Phone (703) 696-0855, AUTOVON 226-0855

Table 4D[illegible]. - MILITARY SEALIFT COMMAND (MSC) RATES (AIRCRAFT)[1]
($ per measurement ton (40 cu. ft.) as of Oct 1989)

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible][2]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible][2]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible][2]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible][2]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][2]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][2]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][2]

1/ Aircraft when shipped as cargo.

2/ Refers to intracoastal shipments, regardless of length.

Data Source: COMSC Inst. 76008H dated 26 May 1989

OPR: CMC (LFT), Phone (703) 696-0855, AUTOVON 226-0855

4-50

Table 4D[illegible]. - MILITARY SEALIFT COMMAND (MSC) RATES (SPECIAL CARGO)[1]
($ per measurement ton (40 cu. ft.) as of Oct 1989)

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible][2]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible][2]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible][2]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible][2]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][2]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][2]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][2]

1/ All tracked and wheeled vehicles (less POV) and any commodity which weighs more than 10,000 lbs. or is more than 35 ft. in

dimension. Does not include uncharted aircraft or stake/van-type cargo-carrying trailers.

2/ Refers to intracoastal shipments, regardless of length.

Data Source: COMSC Inst. 7600.8H dated 26 May 1989

OPR: CMC (LFT), Phone (703) 696-0855, AUTOVON 226-0855

Table 6010. - MILITARY SEALIFT COMMAND (MSC) RATES (OFFshore rates)
($ per measurement ton (40 cu. ft.) as of Oct 1989)

To: / From:	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible][1]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible][1]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Refers to intracoastal shipments, regardless of length.

Data Source: COMSC Inst. 7600.8H dated 26 May 1989

OPR: CMC (LFT), Phone (703) 696-0855, AUTOVON 225-0855

TABLE 4[illegible]. - CARGO HANDLING RATES IN PORT[1]
(@ as of 1 October, 1989)

	LOADING		UNLOADING	
CARGO TYPE	EAST COAST	WEST COAST	EAST COAST	WEST COAST
AIRCRAFT [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
VARIOUS				
GENERAL	[illegible]	[illegible]	[illegible]	[illegible]
REFRIGERATED	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				
BOXES	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] LOADED[2]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]3		-	-	-
[illegible][3]		-	-	-
[illegible][2]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Per measurement ton (i.e. 40 cu. ft.). Cargo handling comprises movement of cargo from ship to dock or dock to ship.

2/ Billings based on cub produced by outside dimensions of van or CONEX.

3/ These rates require a special quotation from the Military Traffic Management Command.

Data Source: Department of the Army Circular 55-89-1 of 15 Sep 89

OPR: CMC (LFT), Phone (703) 696-0855, AUTOVON 226-0855

TABLE [illegible]. - AVERAGE TRANSPORTATION COST WITHIN CONUS[1]

[illegible]	Dollars Per Hundred Weight	[illegible]	Dollars per Ton Mile
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible][2]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible][3]		[illegible]	[illegible]
[illegible]	Dollars Per Hundred Weight	[illegible]	[illegible]
Average	[illegible]	Composite	[illegible]

TERMINAL TRANSSHIPMENT[4]	Dollars Per Mile	[illegible]	Dollars Per Ton Mile
		Commodity	
Average	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]
		[illegible]	[illegible]
		[illegible]	[illegible]
		[illegible]	[illegible]

1/ This table is designed for use in general planning when the points of origin and destination are unknown or when a quick general estimate of transportation costs over various routes is desired

2/ Rate for shipment by rail of less than 10,000 lbs is the same price as loads 10,000 lbs or greater.

3/ This cost factor is an average of all personal property shipments regardless of distance or transportation mode.

4/ Worldwide rate. Terminal transshipment covers movement of cargo from dock to ship or ship to dock.

Data Source: Military Traffic Management Command, Traffic Management Progress Report, Third Quarter FY89 published 05 April 90)

OPR: CMC (FDB-P&R), Phone (703) 614-2206, Autovon 224-2206

SECTION E: ANNUAL OPERATING AND SUPPORT (O&S) COSTS OF SELECTED RESERVE UNITS

4500. INTRODUCTION

1. The costs listed in this section are those normally associated with operation and support of various type units in the SMCR.

2. Table 4E1 contains annual O&S costs of SMCR units. Total costs are broken out by components as follows:

a. Personnel

b. Training Allowance

c. Consumables

d. Base Operating Support and Other Operating and Maintenance

e. USMC-funded O&S

f. USN-funded O&S

4501. DATA USE. This data should be considered in estimating annual recurring expenses of O&S SMCR units.

TABLE 4E1. - ANNUAL OPERATION & SUPPORT (O&S) COSTS OF SELECTED RESERVE UNITS/1 ($000) IN FY90

TYPE UNIT	PERSONNEL COSTS	TRAINING ALLOWANCE	CONSUMABLES	BASE & OTHER OPERATING	TOTAL	USMC FUNDED COSTS	USN FUNDED O&S
ARMY							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
AIR FORCE							
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1. Notional units at T/O strength, operating independently of other units.

2. Pay and allowances, travel and messing, and billeting of reservists.

3. TAM items (types 1 and 2), such as blankets and field jackets, which are procured with O&MMCR funds.

4. Procured with O&MMCR funds.

5. Base operating support and O&MMCR costs other than training allowances and consumables.

6. Total O&MNR funds in support of 4th MAW Flight Hour Program (includes ATD).

Data Source: Marine Corps FY90 President's Budget Submission dated Jan 90.

OPR: CMC (MO-B) Phone (703) 614-1840, Autovon 224-1840

CHAPTER 5

STANDARD ORGANIZATIONS

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SECTION A: PERSONNEL AND EQUIPMENT COSTS

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MARINE CORPS COST FACTORS MANUAL

CHAPTER 5

STANDARD ORGANIZATIONS

5000. GENERAL

1. This chapter provides cost data concerning Marine Corps Standard FMF organizations.* There are four principal standard organizations within the FMF:

A. Marine Division. The three active divisions are the basic ground organizations within the FMF. The principal elements of a Marine Division are a headquarters battalion, three infantry regiments, an artillery regiment, a tank battalion, an assault amphibian battalion, a reconnaissance battalion, and a combat engineer battalion. In combat operations a Marine Division is employed as part of a Marine air/ground task force in conjunction with a Marine Aircraft Wing (MAW) and selected combat support and combat service support units (see Tables 5A1A and 5A1B).

B. Marine Aircraft Wing (MAW). The three MAW's are of somewhat different composition, but all are tasked to provide offensive air support, anti-air warfare support, aerial reconnaissance, assault support, electronic warfare support, and aircraft and missile control. The typical MAW includes a headquarters squadron, four aircraft groups of helicopter and fighter/attack aircraft squadrons, and several support units (see Tables 5A2A and 5A2B).

C. Force Service Support Group (FSSG). The three active FSSG's consist of combat service support units assignable as elements of Marine ground or Marine air/ground task forces. The units thus assigned normally augment units of similar function in the force. Personnel units include engineer, supply, motor transport, maintenance, landing support, and medical and dental battalions (see Tables 5A3A and 5A3B).

D. Specialized Forces. Specialized forces (Tables 5A4A and 5A4B) consist of a wide variety of combat support units assignable as elements of Marine ground and Marine air/ground task forces (see chapter 6)

2. Section A provides cost factors and other data concerning the personnel and equipment assigned to the active FMF organizations discussed above.

3. The table of organization (T/O) for a given type organization may vary among FMF commands. In cases of this nature, the applicable T/O within FMFLANT was used as a "standard."

*NOTE: Standard organizations and detachments thereof are used to form the task-organized forces discussed in chapter 6.

MARINE CORPS COST FACTORS MANUAL

CHAPTER 5

STANDARD ORGANIZATIONS

SECTION A: PERSONNEL AND EQUIPMENT COSTS

5100. INTRODUCTION

1. This section provides data concerning the number and cost of personnel associated with each type of FMF organization. Each of the broad categories of FMF organizations has two tables, one for personnel costs and one for equipment costs, as shown below:

Category	Table
A. Marine Division (MARDIV)	
Personnel	5A1A
Equipment	5A1B
B. Marine Aircraft Wing (MAW)	
Personnel	5A2A
Equipment	5A2B
C. Force Service Support Group (FSSG)	
Personnel	5A3A
Equipment	5A3B
D. Specialized Forces	
Personnel	5A4A
Equipment	5A4B

Each table begins with a summary of data for the overall organization and/or principal subordinate units. In each case, the summarized data is followed with detailed data for lower level units down to the company, battery or squadron. In some cases, lower level data is generally maintained and is therefore not provided. If it is necessary to secure this data, it may be requested from the structure sponsor (OPR - indicated in each table) on a case by case basis. Following each unit designator, information is provided as to the number of each unit assigned to the next higher organizational level by T/O's and the number of such units presently assigned. The footnotes on each table provide additional detail.

2. Two sets of personnel figures are provided: one based on the T/O for each of the type organizations and the other based on typical manning strength in the recent past. In some cases, lower level personnel data is not ordinarily maintained and is therefore not provided. If it is necessary to secure this

data, it may be requested from the structure sponsor.

3. The equipment costs shown are for end items listed in the tables of equipment (T/E's) of the unit listed in the applicable table.

4. The tables contain equipment data relative to notional Marine divisions, Marine aircraft wings, force service support groups, and specialized force units.

5101. DATA USE. The data in this section can be used in a wide variety of costing applications concerning personnel, force structure, and equipment.

TABLE 5A1A.— MARINE DIVISION PERSONNEL COSTS
(FY90 $000)

TYPE ORGANIZATION	UNIT [illegible]	T/O#	TABLE OF ORGANIZATION USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL COST [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ BN, DIV	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
INF REGT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ CO, REGT	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
INF BN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	1	[illegible]	21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
WEAPONS CO	[illegible]	[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
RIFLE CO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
INF REGT	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ CO, REGT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
INF BN	5	[illegible]	[illegible]	[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
WEAPONS CO	[illegible]	[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
RIFLE CO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
ARTY REGT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ BTRY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ARTY BN [illegible]	5	[illegible]	[illegible]	[illegible]	5	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ BTRY	[illegible]	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
155 MM HOW BTRY	[illegible]	[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
ARTY BN [illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ BTRY	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
155 MM HOW BTRY	5	[illegible]	5	[illegible]	[illegible]	5	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
ARTY BN [illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ BTRY	[illegible]	[illegible]	19	[illegible]	2	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
ASSLT AMPH BN	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
H & S CO	1	[illegible]	19	[illegible]	2	[illegible]	[illegible]	[illegible]			1	[illegible]	[illegible]	[illegible]
ASLT AMPH CO	[illegible]	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]			1	[illegible]	[illegible]	[illegible]
[illegible] BN	1	[illegible]	[illegible]	[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
[illegible] CO	5	[illegible]	5	[illegible]	1	1	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]

TABLE SAIA.-- MARINE DIVISION PERSONNEL COSTS
(FY90 $000)

TYPE ORGANIZATION[1]	UNIT MEMBERS	T/O	TABLE OF ORGANIZATION[2] OFFR	ENLD	WOFF	ENLD	ANNUAL COST[3]		TYPICAL STRENGTH[4] OFFR	ENLD	WOFF	ENLD	ANNUAL	COST
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Principal - type organizations are listed starting at left margin; subordinate-type organization of units, if any, are indented. Personnel numbers and costs for subordinate organizations apply to a single organization.

2/ Based on T/O dated January 1990, plus authorized contingency billets. In cases where there are two or more T/O for a given type organization, the more representative (or average) data are provided.

3/ Based on FY-90 average man-year rates from the President's FY-90 Budget Submit: MC officer - $59,116, MC enlisted - $24,971, N officer - $63,761, N enlisted - $27,408.

4/ This column indicates the typical strength at which each type organization is presently manned. Strength figures for companies and batteries are not ordinarily maintained and are therefore not provided.

5/ Data reflects M198 artillery organization.

Data Sources: Based on T/O, dated January 1990, the President's FY-90 Budget Submit, and the Marine Corps logistics Management Information System.

OPR: T/O Information CG MCCDC (WF11B), Phone (703)640-3245, AUTOVON 278-2709
T/E Information CG MCRDAC (LPP-4), Phone (703) 696-0900, AUTOVON 226-0900

TABLE 5A1B - MARINE CORPS DIVISION EQUIPMENT COSTS
(FY90 $000)

TYPE ORGANIZATION 1/	UNIT FACTOR 2/	T/O #	UNIT EQUIPMENT COST 3/	INDIVIDUAL EQUIPMENT COST 4/	TOTAL COST 5/
HQ BN, DIV	1	[illegible]	$56,178	$973	[illegible]
[illegible] REGT	3	[illegible]	[illegible]	$1,[illegible]	[illegible]
HQ CO, REGT	1	[illegible]	$99,101	[illegible]	[illegible]
INF BN	3	[illegible]	$80,257	[illegible]	[illegible]
H & S CO	1	[illegible]	[illegible]	[illegible]	[illegible]
WEAPONS CO	1	[illegible]	$32,117	[illegible]	[illegible]
RIFLE CO	3	[illegible]	[illegible]	[illegible]	[illegible]
INF REGT	1	[illegible]	[illegible]	[illegible]	[illegible]
HQ CO, REGT	1	[illegible]	[illegible]	[illegible]	[illegible]
INF BN	3	[illegible]	$36,577	[illegible]	[illegible]
H & S CO	1	[illegible]	[illegible]	[illegible]	[illegible]
WEAPONS CO	1	[illegible]	[illegible]	[illegible]	[illegible]
RIFLE CO	3	[illegible]	[illegible]	[illegible]	[illegible]
ARTY REGT	1	[illegible]	[illegible]	[illegible]	[illegible]
HQ BTRY	1	[illegible]	[illegible]	[illegible]	[illegible]
ARTY BN (DS)	3	[illegible]	[illegible]	[illegible]	[illegible]
HQ BTRY	1	[illegible]	[illegible]	[illegible]	[illegible]
105MM HOW BTRY (TOWED)	3	[illegible]	[illegible]	[illegible]	[illegible]
ARTY BN (GS)	1	[illegible]	[illegible]	[illegible]	[illegible]
HQ BTRY	1	[illegible]	[illegible]	[illegible]	[illegible]
155MM HOW BTRY (TOWED)	3	[illegible]	[illegible]	[illegible]	[illegible]
ARTY BN (GS/SP)	1	[illegible]	[illegible]	[illegible]	[illegible]
HQ BTRY	1	[illegible]	[illegible]	[illegible]	[illegible]
155MM HOW BTRY (SP)	2	[illegible]	[illegible]	[illegible]	[illegible]
8 INCH HOW BTRY (SP)	1	[illegible]	[illegible]	[illegible]	[illegible]
ASSAULT AMPH BN	1	[illegible]	[illegible]	$522	[illegible]
H & S CO	1	[illegible]	[illegible]	[illegible]	[illegible]
ASLT AMPH CO	3	[illegible]	[illegible]	[illegible]	[illegible]
LAI BN	1	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	1	[illegible]	[illegible]	[illegible]	[illegible]
WEAPONS CO	1	[illegible]	[illegible]	[illegible]	[illegible]
LAI CO	3	[illegible]	[illegible]	[illegible]	[illegible]
COMBAT ENGR BN	1	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ENGR SPT CO	1	[illegible]	[illegible]	[illegible]	[illegible]
COMBAT ENGR CO	4	[illegible]	[illegible]	[illegible]	[illegible]
RECON BN	1	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	1	[illegible]	[illegible]	[illegible]	[illegible]
RECON CO	4	[illegible]	[illegible]	[illegible]	[illegible]
TANK BN	1	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	1	[illegible]	[illegible]	[illegible]	[illegible]
ANTI TANK CO	1	[illegible]	[illegible]	[illegible]	[illegible]
TANK CO	4	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL MARINE DIVISION	1		[illegible]	[illegible]	[illegible]

TABLE 5A1B.--MARINE CORPS DIVISION EQUIPMENT COSTS
(FY90 $000)--CONTINUED.

1/ Principal-type organizations are listed starting at the left margin; subordinate-type organizations or units, if any, are indented.

2/ The Unit Factor column shows the number of such organizations assigned to the next higher organization by Table of Organization (T/O). Personnel numbers and costs for subordinate organizations apply to the unit to which it

belongs.

3/ The unit equipment category represents the total value of the unit's table of equipment (T/E), including individual (782 gear, personal weapons etc.) and organizational (vehicles, crew weapons etc.) equipment which was purchased with Marine Corps Appropriations. The figures in the column are the aggregate of the FY90 replacement value of each item of equipment, plus the cost of outfitting each person in the unit with individual equipment and weapons (FY90 cost is $779 per person). The cost of individual weapons can be determined by multiplying the number of personnel in a units T/O by the (FY90) initial outfitting cost of $779. Yearly upkeep is reflected in the maintenance of individual equipment column.

4/ The maintenance of individual equipment column was derived by multiplying the number of personnel in a units T/O by the FY90 yearly upkeep figure ($448).

5/ Total cost of the T/E item is for a single notional organization or unit (e. g., one infantry regiment, one infantry battalion, or one rifle company). Organizations are based on current structures within the 2nd Marine Division.

6/ Data reflects M198 artillery organizations.

Data Sources: Based on T/O, dated January 1990, the President's FY1990 Budget Submit, and the Marine Corps Logistics Management Information System.

OPR: T/O information - CG MCCDC (WF11B), Phone (703) 640-3245, AUTOVON 278-2709
T/E information - CG MCRDAC (LPP-4) Phone (703) 696-0900, AUTOVON 226-0900

TABLE 5A.2A. - MARINE AIRCRAFT WING PERSONNEL COSTS
(FY90 - $000)

TYPE ORGANIZATION[1]	NO. IN FORCE	T/O #	TABLE OF ORGANIZATION[2] USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANN'L MIL COST[3] USMC	USN	TYPICAL STAFFING[4] USMC OFF	USMC ENL	NAVY OFF	NAVY ENL
MARINE AIRCRAFT WING (COMMAND ELEMENT)	1		[illegible]	[illegible]	0	8	$17,555	$1,701	[illegible]	0	1	0
HQ, MARINE AIRCRAFT WING	1	8600	[illegible]	[illegible]	8	[illegible]	$11,749	$512				
MAW WING HQ SQDN	1	8601	13	25	1	1	$2,155	$91				
MAW BAND	1	8602	1	52	0	2	$1,329	$0				
[illegible]	1	8605	1	24	0	1	[illegible]	$0				
MAW WING MESS UNIT	1	4996	2	45	0	2	$1,582	$0				
[illegible]	1	8671	1	11	0	5	$335	$0				
MARINE AIR CONTROL GRP (MACG)	1		24[illegible]	2,555	6	24	$78,832	$1,040	2	0	2	0
MACG HQ	1	8710	15	77	2	3	$2,842	$227				
MAW TACT AIR CMD SQDN	1	8720	51	131	0	2	$6,755	$55				
MAW AIR TRAFFIC CONT SQDN	1	4840	29	255	0	2	$8,552	$55				
MAW [illegible] SQDN	1	5850	55	502	0	0	$17,502	$0				
MAW AIR CONTROL SQDN	2	8410	25	217	0	1	$7,774	$52				
MAW AIR SUPPORT SQDN	1	8840	44	325	0	2	$8,112	$82				
[illegible]	1	5890	24	253	0	4	$10,324	$110				
[illegible]	1	4840	1	571	2	6	$16,141	$297				
WING SUPPORT GRP (WSG)	1	5790	175	2,555	22	64	$77,950	$5,705	2	0	5	0
[illegible]	1	1791	17	59	2	6	$2,377	$297				
MAW WING SPT SQDN [illegible]	2	5792	25	674	9	24	$16,460	$904				
MAW WING SPT SQDN [illegible]	2	5795	27	502	5	22	$14,254	$887				
MARINE AIR GROUP (ROTARY WING)			45[illegible]	4,925	[illegible]	42	$[illegible]	$2,262	[illegible]	0	1	0
MAG HQ	1	5790	25	77	5	5	$5,322	$158				
MAW [illegible]	1	[illegible]	27	251	1	1	$7,796	$[illegible]				
MAW [illegible]	1	5790	25	196	1	2	$6,191	$146				
MAW [illegible]	2	5770	65	389	1	4	$12,649	$175				
MAW [illegible]	1	[illegible]	12	171	1	1	$4,712	$[illegible]				
MAW [illegible]	2	5290	41	253	1	3	$8,442	$146				
MAW [illegible]	1	5750	41	312	1	3	$10,215	$176				
MARINE AIR GROUP(MAG)(FIXED WING)			449	4,911	25	51	$[illegible]	$[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAG HQ	2	8933	33	77	5	5	$5,322	$158				
MAW [illegible]	2	5910	25	382	1	3	$9,570	$146				
MAW [illegible]	4	5553	24	540	1	3	$7,353	$146				
MAW [illegible]	5	8953	32	315	1	1	$8,994	$[illegible]				
MAW [illegible]	2	5570	34	273	1	3	$9,700	$146				
[illegible]	1	5523	45	333	1	3	$11,212	$176				
MAW [illegible]	1	6933	40	370	1	2	$13,356	$176				
MAW [illegible]	1	5553	47	399	1	3	$12,200	$176				
TOTAL MARINE AIRCRAFT WING	5		1,[illegible]	14,5[illegible]	75	210	$403,998	$10,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Principal-type organizations are listed starting at left margin; subordinate-type organizations or units, if any, are indented. Personnel numbers and costs for subordinate organizations apply to a single organization. As a MAW is task organized, it has no set T/O. Accordingly, the units shown are listed at their respective T/O strengths.

2/ Based on T/O dated January 1990, plus authorized contingency billets. In cases where there are two or more T/O for a given type organization, the more representative (or average) data are provided.

3/ Based on FY90 average man-year rates from the President's FY90 Budget Submit: MC officer - $59,116, MC enlisted - $24,971, N officer - $63,761 N enlisted - $27,408.

4/ This column indicates the typical strength at which each type

organization is presently manned. These columns are zero because MAW's are task organized, have no set T/O, and are manned in accordance with mission requirements. The term "notional wing" is used for planning purposes and describes a Marine air ground task force aviation combat element. It should be noted that fiscal constraints do not permit sufficient active force units for three notional wings.

Data Sources: T/O : based on FY90 Table of Manpower requirements
Cost : based on the January 1990 FY90 President's Budget Submit

OPR: T/O information - CMC (ASM) Phone (703) 614-1392,
AUTOVON 224-1392

TABLE 5A2B. - MARINE AIRCRAFT WING (MAW) EQUIPMENT COST
(FY90 - $000)

TYPE ORGANIZATION	UNIT FACTOR	TABLE OF ORG #	USMC FUNDED: UNIT EQUIPMENT COST	USMC FUNDED: MAINTENANCE OF INDIV. EQUIPMENT[1]	USA FUNDED: [illegible] GROUND SUPPORT EQUIPMENT	TOTAL[5]
MARINE AIRCRAFT WING CMD ELEMENT	[illegible]		[illegible]	$255	[illegible]	$5,331
HQ, MARINE AIRCRAFT WING	[illegible]	[illegible]	[illegible]	$106	[illegible]	[illegible]
MAW WING HQ SQDN	[illegible]	[illegible]	$7,390	[illegible]	[illegible]	$2,080
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	$2,537
[illegible]	[illegible]	[illegible]		$11		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MARINE AIR CONTROL GROUP (MACG)	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]		[illegible]
MAR AIR TRAFFIC CONT SQDN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR WING COMM SQDN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR AIR CONTROL SQDN	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR AIR SUPPORT SQDN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOW ALT AIR DEF BN - LAAD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WING SUPPORT GRP (MWSG)[12]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ SQDN	1	45701	[illegible]	[illegible]	[illegible]	[illegible]
MAR WING SPT SQDN FW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR WING SPT SQDN RW	2	[illegible]	[illegible]	[illegible]	515,000	[illegible]
MARINE AIRCRAFT GROUP (HELO)			[illegible]	[illegible]	[illegible]	[illegible]
MAG HQ[11]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR AVN LOG SQDN	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible][14]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR ATTACK [illegible] SQDN [illegible]						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR MED HELO SQDN [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR HVY HELO SQDN [illegible]						
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
MARINE AIRCRAFT GROUP (FIXED WING)			[illegible]	[illegible]	[illegible]	[illegible]
MAG HQ	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible][15]	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]						
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]						
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL MARINE AIRCRAFT WING	5		[illegible]	[illegible]	[illegible]	[illegible]

1/ Principal - type organizations are listed starting at left margin; subordinate-type organizations or units, if any, are indented. Personnel numbers and costs for subordinate organizations apply to a single organization. The MAW has no T/O or T/E, as it is task organized. It is made up of subordinate units configured so as to best accomplish the mission. Accordingly, the T/E numbers shown represent the equipment that would accompany that unit, were it to deploy as part of a MAW.

2/ The unit equipment category represents the total value of the table of equipment for that unit purchased with Marine Corps Appropriations (so called "Green Dollars"). These data were derived by multiplying the number of each item of equipment listed in a given T/E by the standard unit price (i.e., cost at last purchase) and summing the subtotals. The total includes both organizational T/E items (such as vehicles, crew served weapons, etc.) and individual equipment (such items as 782 gear and individual weapons). The FY90 cost of individual equipment as reflected in the table, is $779 per person for initial outfitting. Yearly upkeep cost is $448 per person thereafter. Accordingly, the numbers reflected here are computed using the following formula: $779 x the number of personnel assigned to each unit (see Table 5A2A - Marine Aircraft Wing Personnel) plus the aggregate total of the units organizational equipment. Yearly upkeep is reflected in the individual equipment column.

3/ The individual equipment category represents the yearly upkeep cost of individual equipment (such as 782 gear and individual weapons). It was derived by multiplying the number of personnel contained in the units Table of Organization by the FY90 yearly upkeep factor of $448.

4/ Represents the average total procurement cost of the current state-of-the-art aircraft. TAC/A, FAC/A, and RECCE assets are being replaced by the F/A-18D. The A-6E’s will also be replaced by the F/A 18D. This cost includes the cost of the aircraft plus airframe, engine and avionics ground support equipment, training, publications costs, and initial spares. The figures in this column represent the aggregate "cost" of a single squadron of that particular aircraft equipped at the FY90 level. Aircraft for a "notional wing" are as follows:

60 AV-8 (FY90/91)	16 F/A-18D (FY91)	60 CH-46E (FY90/91)
20 A-6E (FY90)	6 EA-6B (FY90/91)	48 CH-53D/E (FY90/91)
10 A-6E (FY91)	12 KC-130 (FY90/91)	24 AH-1W (FY90/91)

48 F/A-18A/C (FY90/91) 12 OV-10 (FY90/91) 24 UH-1N (FY90/91)

8 F/A-18d (FY90)

5/ These figures represent the aggregate cost of the type squadron listed times the total number of squadrons contained in a "notional" Marine Aircraft Wing.

6/ The Marine Tactical Air Command Squadron (MTACS) is a newly formed unit that has not been assigned a T/E yet. Its equipment is funded under the MACG Headquarters.

7/ In the MACG, cost includes four MATCUS detachments (T/E 8642) consisting of surveillance radar, precision radar, control tower and navigation aids and a Headquarters unit (T/E 8641).

8/ In the MWCS, cost includes one Headquarters unit (T/E 8652), two MWCS detachments (T/E 8652), and two MWCS units (T/E 8653).

9/ In the MASS, cost includes one Headquarters unit (T/E 8661) and two detachments (T/E 8662).

10/ In the WSG, cost includes four mobile meteorological facilities/vans per wing and Expeditionary Airfield Equipment (EAF). The EAF consists of matting, arresting gear, lighting, FLOLS and accessories.

11/ Mobile Facilities (MF's) and Aviation Ground Support Equipment costs are reflected in MAG HQ to distinguish from aircraft costs of squadrons.

12/ Derivative of parent T/O.

13/ Annotated communities (VMA and VMA(AW)) require one additional squadron for level loading across all three MAWs.

Data Sources: Based on T/O, dated April 1989, the President's FY90/91 Budget Submit, and the Marine Corps Logistics Management Information System, CMC Central Reference Materiel Library (SAZA), and FY90/91 President's Budget Estimate (Aircraft Data Sheet).

OPR: T/O - CMC (ASM), Phone (703) 614-1392, AUTOVON 224-1392
T/E - USMC Funded - CMC (LPP-4), Phone (703) 696-0900, AUTOVON 226-0900
USN Funded - CMC (APP-41), Phone (703) 696-2261, AUTOVON 226-2261

5A32. -- FORCE SERVICE SUPPORT GROUP (FSSG) PERSONNEL COSTS
(FY90 - $000)

TYPE ORGANIZATION[1]	UNIT[2] FACTOR	T/O NO.	TABLE OF ORGANIZATION[3] USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL COST[4] USMC	NAVY	TYPICAL STRENGTH[5] USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL COST[7] USMC	NAVY
H & S BN	1	[illegible]	[illegible]	1,677	17	91	[illegible]	[illegible]	[illegible]	1,[illegible]	15	[illegible]	[illegible]	52,[illegible]
HQ CO	1	[illegible]	[illegible]	457	16	91	517,[illegible]	[illegible]						
SVC CO	1	[illegible]	[illegible]	695	1	0	[illegible]	[illegible]						
COMM CO	1	[illegible]	[illegible]	[illegible]	1	0	[illegible]	[illegible]						
MP CO	1	[illegible]	5	[illegible]	[illegible]	0	[illegible]	40						
MAINT BN	1	[illegible]	[illegible]	1,[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	1,[illegible]	0	0	[illegible]	50
H & S CO	1	[illegible]	[illegible]	744	2	2	56,[illegible]	[illegible]						
ORD MAINT CO	1	[illegible]	10	[illegible]	[illegible]	0	[illegible]	40						
[illegible] MAINT CO	1	[illegible]	4	258	2	0	[illegible]	[illegible]						
ELECT MAINT CO	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40						
MT MAINT CO	1	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	40						
[illegible]	1	[illegible]	12	[illegible]	2	5	58,[illegible]	40						
SUPPLY BN	1	[illegible]	[illegible]	1,[illegible]	6	[illegible]	[illegible]	[illegible]	54	1,[illegible]	2	32	[illegible]	[illegible]
H & S CO	1	[illegible]	16	236	7	2	[illegible]	[illegible]						
[illegible] CO	1	[illegible]	26	861	2	2	[illegible]	[illegible]						
AMMO CO	1	[illegible]	15	327	2	0	[illegible]	[illegible]						
MEDICAL LOG CO	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
ENGINEER BN	1	[illegible]	55	1,[illegible]	3	22	[illegible]	[illegible]	51	1,3[illegible]	0	0	[illegible]	[illegible]
H & S CO	1	[illegible]	21	254	3	22	[illegible]	[illegible]						
[illegible] CO	[illegible]	[illegible]	5	500	0	[illegible]	[illegible]	[illegible]						
BRIDGE CO	[illegible]	[illegible]	5	66	0	[illegible]	[illegible]	[illegible]						
[illegible] CO	[illegible]	[illegible]	-	[illegible]	0	[illegible]	[illegible]	[illegible]						
ENGR CO	3	[illegible]	5	126	0	[illegible]	[illegible]	[illegible]						
LANDING SPT BN	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	50
H & S CO	[illegible]	[illegible]	19	152	1	[illegible]	[illegible]	[illegible]						
[illegible] CO	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]						
[illegible] CO	[illegible]	[illegible]	13	[illegible]	0	0	[illegible]	[illegible]						
LANDING SPT CO	3	[illegible]	3	64	0	0	[illegible]	[illegible]						
MOTRANS BN	[illegible]	[illegible]	33	[illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	50
H & S CO	[illegible]	[illegible]	[illegible]	[illegible]	0	0	[illegible]	50						
[illegible]	[illegible]	[illegible]	7	[illegible]	0	0	[illegible]	50						
[illegible] CO	2	[illegible]	5	[illegible]	0	0	[illegible]	[illegible]						

5A32. -- FORCE SERVICE SUPPORT GROUP (FSSG) PERSONNEL COSTS
(FY90 - $000)

TYPE ORGANIZATION[1]	UNIT[2] FACTOR	T/O NO.	TABLE OF ORGANIZATION[3] USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL COST[4] USMC	NAVY	TYPICAL STRENGTH[5] USMC OFF	USMC ENL	NAVY OFF[6]	NAVY ENL[6]	ANNUAL COST[7] USMC	NAVY
MED BN	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	1	[illegible]	6	[illegible]	[illegible]	66	[illegible]	[illegible]						
[illegible] CO	2	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible] CO	[illegible]	[illegible]	0	12	16	[illegible]	[illegible]	[illegible]						
DENTAL BN	1	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
H & S CO	1	[illegible]	0	5	2	9	[illegible]	[illegible]						
DENTAL CO	3	[illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]						
[illegible]	2	[illegible]	[illegible]	55	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	50
TOTAL FORCE SERVICE SUPPORT GROUP		[illegible]	[illegible]	5,[illegible]	236	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	[illegible]	[illegible]	52,[illegible]

1/ Principal-type organizations are listed starting at left margin; subordinate-type organizations or units, if any, are indented.

2/ The unit factor column is the number of such organizations

assigned to the next higher organization by T/O.

3/ Based on T/O dated January 1990, plus authorized contingency billets. In cases where there are two or more T/O for a given type organization, the more representative (or average) data are provided. Strength figures for companies and batteries are based on a pro rata distribution of the respective parent battalion's manning level.

4/ These numbers reflect the personnel cost of the unit at T/O strength. They are based on FY90 average man-year rates from the President's FY90 Budget Submit: USMC officer - $59,116, USMC enlisted - $24,971, USN officer - $63,761, USN enlisted - $27,408. Personnel numbers and costs for subordinate organizations apply to a single organization. These costs for parental units are aggregate totals of the subordinate units.

5/ This column indicates the typical strength at which each type organization is presently manned. Strength figures for companies and batteries are not ordinarily maintained and are therefore not provided.

6/ Navy typical strength breakdown by company not available.

7/ These numbers reflect the personnel cost of the unit as staffed at typical strength. They are based on FY90 average man-year rates from the President's FY90 Budget Submit: USMC officer - $59,116, USMC enlisted - $24,971, USN officer - $63,761, USN enlisted - $27,408. Personnel numbers and costs for subordinate organizations apply to a single organization. These costs for parental units are aggregate totals of the subordinate units.

Data Sources: Based on T/O, dated January 1990, the President's FY90 Budget Submit, and the Marine Corps Logistics Management Information System.

OPR: T/O Information CG MCCDC, Phone (703) 640-3245, AUTOVON 278-2709

SAMPLE - FORCE SERVICE SUPPORT GROUP (FSSG) EQUIPMENT COSTS
([illegible])

TYPE ORGANIZATION[1]	UNIT FACTOR[2]	TYPE	FY [illegible] UNIT COST[3]	INDIVIDUAL COST	TOTAL COST[3]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	6	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]	[illegible]
TOTAL FORCE SERVICE SUPPORT GROUP			[illegible]	[illegible]	[illegible]

1/ Principle-type organizations are listed starting at left margin; subordinate-type organizations or units, if any are indented.

2/ The Unit Factor column shows the number of such organizations assigned to the next higher organization by Table of Organization (T/O). Personnel numbers and costs for subordinate organizations apply to the unit to which it belongs.

3/ The unit equipment category represents the total value of the unit's table of equipment (T/E), including individual (782 gear, personal weapons etc.) and organizational (vehicles, crew weapons etc.) equipment which was purchased with Marine Corps Appropriations. The figures in the column

are the aggregate of the FY90 replacement value of each item of equipment, plus the cost of outfitting each person in the unit with individual equipment and weapons (FY90 cost is $779 per person). The cost of individual weapons can be determined by multiplying the number of personnel in a units T/O by the (FY90) initial outfitting cost of $779. Yearly upkeep is reflected in the maintenance of individual equipment column.

4/ The maintenance of individual equipment column was derived by multiplying the number of personnel in a units T/O by the FY90 yearly upkeep figure ($448).

5/ Total cost is the sum of unit cost (column 4) and individual cost (column 5) times the number of units in the current manning level (the second number in column 2, units required).

Data Sources: Based on T/O, dated January 1990, the President's FY90 Budget Submit, and information contained in the Marine Corps Logistics Management Information System.

OPR: T/O Information CG MCCDC (WF11B), Phone (703) 640-3245, AUTOVON 278-2709
T/E Information CG MCRDAC (LPP-4), Phone (703) 696-0900, AUTOVON 226-0900

SOCL - SPECIALIZED FORCES PERSONNEL COSTS
(FY90 - $000)

TYPE ORGANIZATION[1]	UNIT[2] FACTOR	T/O NO.	NUMBER OF ORGANIZATIONS[2] USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL COST[3] USMC	NAVY	TYPICAL STRENGTH[2] USMC OFF	USMC ENL	NAVY OFFICER	NAVY ENLISTED	ANNUAL COST[4] USMC	NAVY
[illegible]	1	[illegible]	53	86	2	4	[illegible]	[illegible]	50	85	2	5	[illegible]	[illegible]
[illegible]	1	[illegible]	4	107	2	7	[illegible]	[illegible]	2	26	2	7	[illegible]	[illegible]
[illegible]	2	[illegible]	52	116	5	5	[illegible]	[illegible]	45	107	4	2	[illegible]	[illegible]
[illegible]	6	[illegible]	13	26	1	2	[illegible]	[illegible]	12	26	1	2	[illegible]	[illegible]
[illegible]	1	[illegible]	147	2,[illegible]	1	11	[illegible]	[illegible]	139	2,[illegible]	1	11	[illegible]	[illegible]
[illegible]	1	[illegible]	-	37	1	1	[illegible]	[illegible]	12	37	1	1	[illegible]	[illegible]
[illegible]	1	[illegible]	2	[illegible]	1	1	[illegible]	[illegible]	1	[illegible]	1	1	[illegible]	[illegible]
[illegible]	1	[illegible]	27	[illegible]	1	1	[illegible]	[illegible]	26	[illegible]	1	1	[illegible]	[illegible]
[illegible]	1	[illegible]	16	215	1	7	[illegible]	[illegible]	15	[illegible]	1	6	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]	10	[illegible]	1	1	[illegible]	[illegible]
[illegible]	1	[illegible]	52	210	4	1	[illegible]	[illegible]	47	[illegible]	4	1	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	1	4	[illegible]	[illegible]	[illegible]	[illegible]	1	4	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	2	12	[illegible]	[illegible]	40	[illegible]	2	10	[illegible]	[illegible]
SPECIALIZED FORCES, PFT			[illegible]	2,[illegible]	[illegible]	51	[illegible]	[illegible]	[illegible]	2,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Principal-type organizations are listed starting at left margin; subordinate-type organizations or units, if any, are indented.

2/ The unit factor column is the number of such organizations

assigned to the next higher organization by T/O.

3/ Based on T/O dated January 1990, plus authorized contingency billets. In cases where there are two or more T/O for a given type organization, the more representative (or average) data are provided. Strength figures for companies and batteries are based on a pro rata distribution of the respective parent battalion's manning level.

4/ These numbers reflect the personnel cost of the unit at T/O strength. They are based on FY90 average manyear rates from the President's FY90 Budget Submit: USMC officer - $59,116, USMC enlisted - $24,971, USN officer - $63,761, USN enlisted - $27,408. Personnel numbers and costs for subordinate organizations apply to a single organization. These costs for parental units are aggregate totals of the subordinate units.

5/ This column indicates the typical strength at which each type organization is presently manned. Strength figures for companies and batteries are not ordinarily maintained and are therefore not provided.

6/ Navy typical strength breakdown by company not available.

7/ These numbers reflect the personnel cost of the unit as staffed at typical strength. They are based on FY90 average man-year rates from the President's FY90 Budget Submit: USMC officer - $59,116, USMC enlisted - $24,971, USN officer - $63,761, USN enlisted - $27,408. Personnel numbers and costs for subordinate organizations apply to a single organization. These costs for parental units are aggregate totals of the subordinate units.

Data Sources: Based on T/O, dated January 1990, the President's FY90 Budget Submit, and the Marine Corps Logistics Management Information System.

OPR: T/O Information MCCDC (WF11D), Phone (703) 640-3321, AUTOVON 278-3321
T/E Information MCRDAC (LPP-4), Phone (703) 696-0899, AUTOVON 224-0899

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ The organizations listed herein represent units under the direct operational control of FMF commanders. Costs are in thousands of dollars.

2/ Principal-type organizations are listed starting at left margin; subordinate-type organizations or units, if any, are indented. Personnel numbers and costs for subordinate organizations apply to a single organization.

3/ The Unit Factor column shows the number of such organizations assigned to the next higher organization by Table of Organization (T/O). Personnel numbers and costs for subordinate organizations apply to the unit to which it belongs.

4/ The unit equipment category represents the total value of the unit's table of equipment (T/E), including individual (782 gear, personal weapons etc.) and organizational (vehicles, crew weapons etc.) equipment which was purchased with Marine Corps Appropriations. The figures in the column are the aggregate of the FY90 replacement value of each item of equipment, plus the cost of outfitting each person in the unit with individual equipment and weapons (FY90 cost is $779 per person). The cost of individual weapons can be determined by multiplying the number of personnel in a units T/O by the (FY90) initial outfitting cost of $779. Yearly upkeep is reflected in the maintenance of individual equipment column.

5/ The maintenance of individual equipment column was derived by multiplying the number of personnel in a units T/O by the FY90 yearly upkeep figure ($448).

6/ Total cost is the sum of unit cost (column 4) and individual cost (column 5) times the number of units in the current manning level (the second number in column 2, units required).

Data Sources: Based on T/O, dated January 1990, the President's FY90 Budget Submit, and the Marine Corps Logistics Management Information System.

OPR: T/O Information MCCDC (WF11D), Phone 640-3321, AUTOVON 278-3321
T/E Information MCRDAC (LPP-4), Phone (703) 696-0900, AUTOVON 226-0900

CHAPTER 6

NOTIONAL TASK FORCES

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SECTION B: MARINE AIR/GROUND TASK FORCES (MAGTF'S)		
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MARINE CORPS COST FACTORS MANUAL

CHAPTER 6

NOTIONAL TASK FORCES

6000. GENERAL

1. This chapter provides cost data pertaining to task forces. Such factors are formed from available Fleet Marine Force (FMF) resources as combat or training missions dictate. These specially tailored organizations fall into two categories:

A. Marine Ground Task Forces

B. Marine Air/Ground Task Forces (MAGTF's)

2. Section A provides data concerning the various types of ground task forces. Section B does the same for MAGTF's.

3. Data for the basic Marine Corps units which comprise task forces can be found in chapter 5.

CHAPTER 6

NOTIONAL TASK FORCES

SECTION A: MARINE GROUND TASK FORCES

6100. INTRODUCTION

1. Ground task forces are formed to facilitate the assault landing of ground combat units. There are two types:

a. Battalion Landing Teams (BLT's). A BLT is the basic combat unit for planning an assault landing. It consists of an infantry battalion reinforced by necessary combat support and combat support and combat service support elements to accomplish a given assault landing mission.

b. Regimental Landing Teams (RLT's). An RLT is normally formed when combat strength somewhat greater than a BLT is desired. An RLT normally consists of an infantry regiment reinforced by the necessary combat support and combat service support elements required to facilitate assault landings. The ground combat element of the RLT is task organized and is usually composed of two to five battalions.

2. Tables 6A1 and 6A2 provide data concerning typical BLT's and RLT's, respectively.

6101. DATA USE. The personnel costs of a notional task force can be used in a broad variety of planning and evaluation techniques relating to task force analysis.

[illegible]

TYPE ORGANIZATION	[illegible] FACTOR 1/	USMC [illegible]	USMC [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL [illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ A BLT normally consists of the ground combat element of the Marine Expeditionary Unit (MEU). All costs are in thousands of dollars. Totals may not add due to rounding.

2/ Based on FY90 annual workyear rates of $59,116 and $24,971 for USMC officers and enlisted respectively.

3/ Based on FY90 annual workyear rates of $63,761 and $27,408 for USN officers and enlisted, respectively.

4/ The prescribed allowance of equipment for an organization. This includes both unit and individual equipment, plus a $448 yearly individual equipment maintenance cost.

Data Sources: HQMC Logistics Management Information System data base; FY90 Workyear Averages from the President's FY90/91 Budget

OPR: Personnel Info - Ground: MCCDC (WF11B), Phone (703) 640-3133, AUTOVON 278-3133
Air: CMC (ASM), Phone (703) 614-1392, AUTOVON 224-1392
Support: MCCDC (WF11B), Phone (703) 640-3133, AUTOVON 278-3133
Equipment Info - MCRDAC (LPP-4), Phone (703) 696-0900, AUTOVON 226-0900

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ An RLT normally consists of the ground combat element of a Marine Expeditionary Brigade (MEB). Like an MEB, the RLT is task-organized, and as such the composition will fluctuate in accordance with the requirements of the mission. All costs are in thousands of dollars. Totals may not add due to rounding.

2/ Based on FY90 annual workyear rates of $59,116 and $24,971 for USMC officers and enlisted, respectively.

3/ Based on FY90 annual workyear rates of $63,761 and $27,408 for USN officers and enlisted, respectively.

4/ The prescribed allowance of equipment for an organization. This includes both unit and individual equipment, and a $448 individual equipment maintenance cost.

5/ Based on T/O strength for a three infantry company, three infantry battalion regiment.

6/ A reinforced unit is the basic unit plus any attachments the commander may feel is required. These units are costed based upon the composition of the units in an MEU. That portion of the unit which above its T/O, is costed as a percentage of the attachments parent T/O.

7/ Based on the T/O structure for the unit.

8/ A detachment could be any subset of a unit which could provide a combat or combat support capability. These units are costed at a "notional" detachment level as a percentage of their parent T/O.

Data Sources: HQMC Logistics Management Information System data base; FY90 Workyear Averages from the President's FY-90/91 Budget.

OPR: Personnel Info - Ground: CMC (POG), Phone (703) 614-2505, AUTOVON 224-2505
Air: CMC (ASM), Phone (703) 614-1392, AUTOVON 224-1392
Support: CMC (LPM), Phone (703) 614-2473, AUTOVON 224-2473
Equipment Info - CMC (LMO-3), Phone (703) 614-5394, AUTOVON 224-5394

CHAPTER 6

NOTIONAL TASK FORCES

SECTION B: MARINE AIR/GROUND TASK FORCES (MAGTF'S)

6200. INTRODUCTION

1. MAGTF's are FMF organizations mission-tailored for the conduct of closely integrated air and ground operations. MAGTF's typically consist of the following elements:

a. A command element

b. A ground element

c. An aviation combat element

d. A combat service support element (including units of the Navy).

2. There are three types of MAGTF's:

a. Marine Expeditionary Unit (MEU). A MEU generally includes a BLT, a composite squadron and a MEU service support group. The squadron is normally limited to helicopters, although fixed-wing attack and observation aircraft could be assigned.

b. Marine Expeditionary Brigade (MEB). A MEB usually includes an RLT, a Marine aircraft group (MAG), and a MEB service support group. The MAG typically contains Marine fixed-wing attack, helicopter transport, and antiair warfare capabilities.

c. Marine Expeditionary Force (MEF). A MEF normally includes a reinforced Marine division, a Marine Aircraft Wing (MAW), and a force service support group.

6201. DATA USE. The personnel and equipment supply cost of a notional task force can be used in a broad variety of planning and evaluation techniques relating to task force analysis.

[illegible]

1/ A MEU is task organized to meet the requirements of the mission(s) and geographical area. Accordingly, there is no

set organizational structure. A "notional" MEU is provided here, and data provided is intended for use in very broad estimates only. Accordingly, this data must be used with caution and should be qualified before given out. All costs are in thousands of dollars. Totals may not add due to rounding.

2/ Based on FY90 annual workyear rates of $59,116 and $24,972 for USMC officers and enlisted, respectively.

3/ Based on FY90 annual workyear rates of $63,761 and $27,408 for USN officers and enlisted, respectively.

4/ The prescribed allowance of equipment for an organization. This includes both unit and individual equipment, and includes a $448 yearly individual maintenance cost. For detachments, the equipment is costed as a percentage of the total value of the parent unit's T/O, based upon the number of personnel in the unit. Reinforced units are costed by taking a percentage of the value of the reinforcement's parent T/O (value of total T/E divided by T/O times the number of personnel in the reinforcing unit) and adding it to the value of the reinforced unit's T/E.

5/ May be reinforced with 6 AV-8B (T/0# 8860T - 9 Marine Corps enlisted, and 1 Navy enlisted).

6/ The detachments that make up the MEU are costed as a percentage of their parent T/O, based upon the number of personnel in an attachment. As a detachment may be any size, a nominal size has been used, based upon a "normal" detachment size.

7/ Derivative of parent unit T/O

8/ Reinforced units are composed of the basic unit plus any attachments, and are costed with the attachments.

Data Sources: HQMC Logistics Management Information System data base; FY90 workyear Averages from the President's FY90/91 Budget

OPR: Personnel Info - Ground: CG,MCCDC (WF11B) Phone (703)640-3133 AUTOVON 278-3133
Air: CMC (ASM), Phone 694-1392 AUTOVON 224-1392
Support: CG, MCCDC (WF11b), Phone (703)640-3321

AUTOVON 278-3321
Equipment Info - CG, MCRDAC (LPP-4), Phone
(202)696-0900
AUTOVON 226-0900

[illegible]

TYPE ORGANIZATION	UNIT FACTOR	T/O NO	Off	Enl	Off	Enl	ANNUAL	COSTS	LIFE CYCLE COSTS
[illegible]	1	[illegible]	[illegible]	[illegible]	112	563	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	0	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	2	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	0	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2	[illegible]	[illegible]	[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	1	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	11	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]		[illegible]	0	0	[illegible]	[illegible]	

TABLE 6A2. -- NATIONAL GUARDS REMODELING SAVINGS (FY-N: REDUCED COSTS[1]
(FY90)

TYPE UNIT/ACTION	[illegible] FACTOR[1]	[illegible] NO.	[illegible] OFF	[illegible] ENL	[illegible] OFF	[illegible] ENL	[illegible] ANNUAL COST[1]	[illegible] COSTS, HAW[1]	[illegible] EXPS[1]
CONST ENGINEER CO (RPTR)	1	[illegible]	5	[illegible]	0	[illegible]	[illegible]	$[illegible]	[illegible]
[illegible] ENGINEER CO	1	[illegible]	[illegible]	109	0	0	[illegible]	[illegible]	[illegible]
DET, [illegible]	1	[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]
DET, ARS CO EOD ENG BN	1	[illegible]	0	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]									
[illegible]	1	[illegible]	[illegible]	[illegible]	1	1	[illegible]	$[illegible]	[illegible]
DET, ARS CO [illegible] BN	1	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]									
[illegible]	1		0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET, [illegible] BN	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HED TRN CO	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]									
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]									
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET, [illegible] CO, LAW BN	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] (-)	1	[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]
[illegible] SUPPORT BLDNGS		[illegible]							
[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]									
[illegible]	1	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	$[illegible]	[illegible]
DET, [illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]
DET, [illegible]	1	[illegible]	[illegible]	[illegible]	1	0	[illegible]	[illegible]	[illegible]
DET, [illegible] CO BSS BN	1	[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]
[illegible]									
[illegible]	1		[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]
DET, [illegible] CO LSS BN	1	[illegible]	1	[illegible]	0	0	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	0	1	[illegible]	[illegible]	[illegible]
[illegible] CO, LSS BN	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE C-[illegible]. -- NOTIONAL MARINE EXPEDITIONARY BRIGADE (MEB) RESOURCE COSTS[1] (FY90)

[illegible]	UNIT [illegible]	T/O NO.	USMC OFF	USMC ENL	USN OFF	USN ENL	ANNUAL [illegible][2]	[illegible][3]	T/E EQUIPMENT COSTS[4]
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	$10,772	10	$8,757
[illegible]	1	[illegible]	[illegible]	75	[illegible]	[illegible]	$2,291	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	40	$1,827
[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	$1,722	40	[illegible]
CONTACT TEAM	1	[illegible]	[illegible]	23	[illegible]	[illegible]	[illegible]	40	[illegible]
[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	$1,[illegible]	40	[illegible]
DET, [illegible]	1	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	40	[illegible]
SUPPLY [illegible]	1		[illegible]	257	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	1	[illegible]	1	[illegible]	[illegible]	40	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	1	$1,[illegible]	40	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	40	[illegible]
DET, [illegible] CO, SUP [illegible]	1	[illegible]	[illegible]	66	0	[illegible]	$2,[illegible]	[illegible]	[illegible]
DET, [illegible]	1	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$2,[illegible]
[illegible] SUPPORT [illegible]	1		17	[illegible]	1	[illegible]	$17,[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	0	42	0	[illegible]	$1,[illegible]	50	$7,[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	50	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	0	0	$2,[illegible]	50	[illegible]
[illegible], [illegible] SUPT CO, [illegible]	1	[illegible]	3	170	0	0	$[illegible]	[illegible]	$9,[illegible]
[illegible]	1		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	0	[illegible]	0	1	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	$2,[illegible]	[illegible]
[illegible]	1		1	[illegible]	[illegible]	[illegible]	$1,[illegible]	$3,[illegible]	[illegible]
DET, [illegible]	1	[illegible]	1	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]
[illegible] AND CLEARING CO	1	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MOTOR TRANSPORT [illegible]	1		7	[illegible]	0	0	$7,[illegible]	[illegible]	$16,[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	0	0	[illegible]	[illegible]	[illegible]
[illegible] CO, [illegible]	1	[illegible]	[illegible]	[illegible]	0	0	$2,[illegible]	50	$4,[illegible]
DET, [illegible]	1	[illegible]	[illegible]	[illegible]	0	0	$2,[illegible]	50	[illegible]

TABLE 6-2. [illegible] BRIGADE (MEB) RESOURCES [illegible]
(FY90)

TYPE ORGANIZATION	UNIT SIZE	T/O NO.	PERSONNEL ENL	PERSONNEL OFF	PERSONNEL ENL	ANNUAL COST, $ MILL	COST, $ MILL	10% CONTINGENCY COSTS[1]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET, MARINE AIR SUPPORT SQDN (MASS)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET, MARINE AIR TRAFFIC CONTROL SQDN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MISSILE BTRY	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET, [illegible] BTRY	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FIRING BTRY	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HQ MAG (-)	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MARINE AIR LOGISTICS SQDN (MALS) (TM)	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MARINE AIR SUPPORT SQDN (MASS) (-)	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET, [illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SQDN [illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SQDN [illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET, [illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET, [illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MARINE AIRCRAFT GROUP [illegible]	1		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MALS	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MASS (R)	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

6-14

1/ A Marine Expeditionary Brigade is task-organized to accomplish a specific mission/perform in a given geographical area; therefore, a MEB is not standard. For contingency planning purposes, a "notional" MEB is used. There are two types, the Maritime Prepositioned Ship (MPS) MEB and the amphibious MEB. The MPS MEB would deploy by air and marry up with the equipment aboard the MPS ships. An Amphibious MEB is a force with it’s T/E equipment that would normally deploy by ship. The MEB presented here is based on the "notional" amphibious MEB. Because the information provided is based upon contingency planning, the cost data provided is intended to only be used in very broad planning scenarios. It is not intended to provide definitive costs. All costs are in thousands of dollars. Totals may not add due to rounding.

2/ Based on FY90 annual workyear rates of $59,116 and $24,971 for USMC officers and enlisted, respectively.

3/ Based on FY90 annual workyear rates of $63,761 and $27,408 for USN officers and enlisted, respectively.

4/ The prescribed allowance of equipment for an organization. This includes both unit and individual equipment and a $448 individual equipment maintenance cost. Equipment costs are based upon the total T/E of a given unit. Units that are reinforced are costed by including a percentage of the value of the attachment's parent's T/E, based upon the number of personnel (attached units parent T/E divided by parent T/O times the number of personnel in the attachment). Detachments are likewise costed as a percentage of the value of the parent's total T/E, determined the same way as attachments. Since the size of the detachment is determined by the mission requirements of the unit it is attached to, the detachments shown here represent a "notional" detachment, based upon past practices with detachments of a given type.

Data Sources: HQMC Logistics Management Information System data base; FY90 Workyear Averages from the President's FY90/91 Budget; T/O dated April 89

OPR: T/O Information - CMC (MPC) Phone (703) 614-8381, AUTOVON 224-8381
T/E Information - USMC funded - CMC (LPP-4) Phone (703) 696-0900, AUTOVON 226-0900
USN funded - CMC (APP-41) Phone (703) 614-2261, AUTOVON 224-2261

Table 6E1A. -- [illegible] EXPEDITIONARY [illegible] (... MEF)[1]

([illegible] 5000)

TASK ORGANIZATION	UNIT FACTOR	UIC NO.	USMC OFF	USMC ENL	USN OFF	USN ENL	[illegible]	[illegible]	[illegible] T/T[2]
[illegible]	1		1,070	12,776	67	597	217,201	12,036	1,297,525
MPS BASED MEB									
COMMAND ELEMENT	1	10000	106	622	7	16	25,765	585	97,853
HQ, MEB	1	[illegible]	57	122	4	7	6,615	467	62,185
DET, [illegible]	1	[illegible]	10	24	1	0	1,110	75	3175
DET, [illegible] GROUP	1	[illegible]	24	[illegible]	2	9	18,455	175	15,532
DET [illegible] GROUP [illegible]	1	[illegible]	1	2	0	0	176	2	
DET, [illegible] CO	1	[illegible]	2	42	0	0	1,542	2	
DET, [illegible]	1	[illegible]	2	12	0	0	251	2	
DET TOPOGRAPHIC PLT	1	[illegible]	1	5	0	0	11	1	
DET [illegible]	1	[illegible]	2	11	0	0	225	2	
DET [illegible]	1	[illegible]	1	15	0	0	505	2	
DET [illegible]	1	[illegible]	1	12	0	0	305	1	
DET, FORCE RECON CO	1	[illegible]	3	35	0	2	1,0[illegible]	55	
CI TEAM	1	[illegible]	1	15	0	0	5[illegible]	2	
DET, [illegible]	1	[illegible]	1	54	0	0	567	1	
DET [illegible]	1	[illegible]	2	23	0	0	[illegible]	1	
DET [illegible] CO RADIO BN	1	[illegible]	2	31	0	2	1,1[illegible]	[illegible]	
DET ANGLICO	1	[illegible]	5	61	1	1	1,5[illegible]	[illegible]	
DET, [illegible] CO COMM BN	1	[illegible]	4	144	1	0	3,564	1	
[illegible] BN	1	[illegible]	13	127	0	0	5,186	4	
DET [illegible]	1	[illegible]	1	25	1	4	455	175	
GROUND COMBAT ELEMENT	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1[illegible],[illegible]	7,0[illegible]	5[illegible],[illegible]
[illegible]	1	[illegible]	4	12[illegible]	0	0	3,250	1	[illegible]
INFANTRY REGIMENT	1		156	7503	11	2[illegible]	[illegible]	[illegible]	[illegible]
HQ CO, REGT	1	[illegible]	[illegible]	217	[illegible]	3	5,[illegible]	210	[illegible]
INF BN	3	[illegible]	44	851	[illegible]	[illegible]	[illegible]	2,300	13,[illegible]
ARTILLERY REGT (REIN)	1		[illegible]	[illegible]	7	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] ARTY REGT	1	[illegible]	1	[illegible]	2	5	1,[illegible]	0	[illegible]
[illegible] BTRY, DS BN	3	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	425	54,[illegible]
155MM [illegible] BTRY, GS BN	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5,0[illegible]	62	57,2[illegible]
155MM (SP) [illegible], [illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	5	2,7[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
DET HQ BTRY GS BN (SP)	1	[illegible]	1	30	[illegible]	1	[illegible]	[illegible]	9[illegible]

[illegible] -- MARITIME PREPOSITIONED SHIPPING MARINE EXPEDITIONARY BRIGADE (MPS MEB)[3]

[illegible]

[illegible]	[illegible]	[illegible]	PERSONNEL [illegible]		[illegible]		[illegible]	[illegible]	[illegible]
			[illegible]		[illegible]				
			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1		27	557	2	12	[illegible]	468	[illegible]
[illegible]	1	[illegible]	9	129	2	12	[illegible]	[illegible]	[illegible]
[illegible]	2	[illegible]	7	[illegible]	1	0	[illegible]	0	[illegible]
[illegible]	1		25	430	4	8	[illegible]	285	[illegible]
[illegible]	1	[illegible]	9	71	1	4	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	4	[illegible]	1	2	[illegible]	0	[illegible]
[illegible]	2	[illegible]	5	307	2	8	[illegible]	0	[illegible]
[illegible]	1		31	[illegible]		16	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	1	66	2	14	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	0	35	1	2	[illegible]	0	[illegible]
[illegible]	2	[illegible]	5	207	2	4	[illegible]	10	[illegible]
[illegible]	1		44	[illegible]	2	18	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	45	508	2	18	[illegible]	[illegible]	[illegible]
[illegible]	3	[illegible]	5	105	0	2	[illegible]	0	[illegible]
[illegible]	1	[illegible]	2	172	0	2	[illegible]	0	[illegible]
[illegible]	1	[illegible]	4	46	0	4	[illegible]	115	[illegible]
[illegible]	1	[illegible]	0	1	0	4	25	115	[illegible]
[illegible]	1	[illegible]	4	15	0	0	[illegible]	5	[illegible]
[illegible]	1	[illegible]	632	[illegible]	54	39	[illegible]	[illegible]	[illegible]
[illegible]	1		71	205	12	76	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	27	51	2	2	[illegible]	182	[illegible]
[illegible]	1	[illegible]	25	77	4	7	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	25	77	6	7	[illegible]	[illegible]	[illegible]
[illegible]	1		12	188	0	5	[illegible]	137	[illegible]
[illegible]	1	[illegible]	12	55	0	1	[illegible]	37	[illegible]
[illegible]	1	[illegible]	11	191	0	0	[illegible]	7	[illegible]
[illegible]	1	[illegible]	2	44	0	0	[illegible]	2	[illegible]
[illegible]	1	[illegible]	17	96	0	1	[illegible]	37	[illegible]
[illegible]	1	[illegible]	25	225	0	3	[illegible]	64	[illegible]
[illegible]	2	[illegible]	4	72	0	0	[illegible]	2	[illegible]

Table 6-2A. — MARITIME PREPOSITIONED SHIPPING MARINE EXPEDITIONARY BRIGADE (MPS MEB)[1]

(FY90 $000)

TYPE ORGANIZATION	UNIT FACTOR	T/O NO.	USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL PAY	COST/UNIT[2]	EQUIPMENT COST UNIT
LIGHT ANTIAIRCRAFT MISSILE BN (-)	1		9	226	0	[illegible]	6,126	27	31,526
DET, [illegible] BTRY	1	8883	3	81	0	[illegible]	2,200	27	71,007
[illegible]	1	[illegible]	6	172	0	0	3,926	0	4517
LIGHT ANTIAIRCRAFT DEFENSE BN (-)	1		6	163	0	2	4,543	35	71,290
DET, [illegible]	1	[illegible]	1	22	0	[illegible]	727	77	1280
FIRING BTRY	1	[illegible]	5	141	0	[illegible]	3,817	27	[illegible]
FIXED WING GROUP	1		245	[illegible]	[illegible]	51	62,761	1,758	447,529
[illegible]	1	[illegible]	26	282	[illegible]	3	8,379	746	[illegible]
[illegible]	1	[illegible]	26	476	5	11	17,344	847	416,441
[illegible]	2	[illegible]	23	240	[illegible]	3	7,435	148	55,877
[illegible]	1	[illegible]	36	315	[illegible]	3	9,997	146	52,546
[illegible]	1	[illegible]	[illegible]	271	[illegible]	5	8,719	146	8490
DET, [illegible]	1	[illegible]	21	159	0	[illegible]	5,272	27	51,758
DET, [illegible]	1	[illegible]	17	140	0	3	5,233	57	51,752
DET, [illegible]	1	[illegible]	37	256	[illegible]	2	8,137	170	[illegible]
DET, [illegible]	1	[illegible]	0	59	0	3	1,475	0	51,957
ROTARY WING GROUP	1		214	1829	9	55	56,529	1,355	512,333
[illegible]	1	[illegible]	25	253	[illegible]	3	7,753	146	51,238
[illegible]	1	[illegible]	27	627	3	23	16,832	857	415,356
[illegible]	1	[illegible]	32	175	[illegible]	3	6,212	146	5551
[illegible]	1	[illegible]	31	256	[illegible]	2	7,774	111	4427
DET, [illegible]	2	[illegible]	10	63	0	1	2,154	27	5702
[illegible]	1	[illegible]	47	774	[illegible]	5	17,085	175	2439
DET, [illegible]	1	[illegible]	16	55	0	1	2,258	27	4240
COMBAT SERVICE SUPPORT		[illegible]	90	2774	27	165	69,771	15,474	366,660
DET, [illegible]	1		35	425	4	32	12,352	1,152	52,527
DET, [illegible]	1	[illegible]	15	175	6	17	1,978	1,117	51,636
DET, [illegible]	1	[illegible]	12	49	0	5	1,944	[illegible]	5768
[illegible]	1	[illegible]	5	153	0	0	3,627	[illegible]	5756
DET, [illegible]	1	[illegible]	5	170	1	[illegible]	7,994	[illegible]	[illegible]
DET, SUPPLY BN	1		[illegible]	272	1	21	7,646	[illegible]	[illegible]
DET, [illegible]	1	[illegible]	2	46	0	0	1,756	[illegible]	5857
DET, [illegible]	1	[illegible]	3	80	0	0	2,375	[illegible]	3357
DET MEDICAL BN	1	[illegible]	0	3	1	27	75	[illegible]	[illegible]
DET, [illegible]	1	[illegible]	2	115	0	0	2,990	[illegible]	5179
DET, [illegible]	1	[illegible]					0	[illegible]	[illegible]

TABLE [illegible] — MARITIME PREPOSITIONED SHIPPING MARINE EXPEDITIONARY BRIGADE (MPS MEB)[1]
([illegible])

TYPE UNITS OPTION	UNIT COUNT	UIC NO.	USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL (000)[2]	COSTS NAVY[3]	EQUIPMENT (000)
[illegible]	1		15	[illegible]		[illegible]	[illegible]		58,[illegible]
DET, [illegible]	1	[illegible]	2	[illegible]			[illegible]		[illegible]
DET, [illegible]	1	[illegible]	2	[illegible]			2,[illegible]		51,[illegible]
DET, [illegible]	1	[illegible]	3	155	0	0	[illegible]		[illegible]
DET, [illegible] MAINT CO	1	[illegible]	3	102	0	0	2,[illegible]		[illegible]
DET, [illegible] MAINT CO	1	[illegible]	1	55	0	0	[illegible]	0	41,[illegible]
DET, [illegible] MAINT CO	1	[illegible]	1	[illegible]	0	0	1,[illegible]	0	51,[illegible]
DET, [illegible]	1		19	[illegible]	1	[illegible]	15,[illegible]	[illegible]	[illegible]
DET, [illegible] CO	1	[illegible]	5	[illegible]	1	[illegible]	[illegible]	247	[illegible]
DET, [illegible]	1	[illegible]	[illegible]	171	0	3	[illegible]	0	[illegible]
[illegible] CO	1	[illegible]	5	136	0	1	7,[illegible]	0	42,[illegible]
DET, [illegible] CO	1	[illegible]	1	[illegible]	0	[illegible]	[illegible]	0	[illegible]
BULK FUEL [illegible]	1	[illegible]	6	200	0	[illegible]	[illegible]	0	[illegible]
DET, [illegible]			[illegible]	[illegible]			[illegible]	91	[illegible]
DET [illegible] CO		[illegible]	[illegible]	50			[illegible]	91	[illegible]
DET, [illegible] CO		[illegible]	0	[illegible]	0	1	[illegible]	0	[illegible]
[illegible] SPT CO		[illegible]	[illegible]	[illegible]	0	1	[illegible]	0	[illegible]
DET, [illegible] OPS CO		[illegible]	2	[illegible]	[illegible]	1	5,315	0	[illegible]
DET, [illegible]			[illegible]	[illegible]	1	1	7,[illegible]	0	[illegible]
DET, [illegible] CO		[illegible]	2	[illegible]	1	[illegible]	1,[illegible]	0	[illegible]
DET, [illegible]		[illegible]	[illegible]	[illegible]	1	[illegible]	2,[illegible]	0	[illegible]
[illegible] CO		[illegible]	5	[illegible]	1	[illegible]	[illegible]	0	53,[illegible]
DET, [illegible]			0	[illegible]	[illegible]	[illegible]	[illegible]	11,[illegible]	[illegible]
DET, [illegible] CO	1	[illegible]	0	[illegible]	[illegible]	53	[illegible]	2,[illegible]	[illegible]
[illegible] CO	1	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
COLLECT & CLEAR CO	1	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DET DENTAL CO	1	[illegible]	0	0	[illegible]	[illegible]	1	1,[illegible]	[illegible]
MISC MATERIAL COSTS[5]									$5[illegible]
CLASS I									
[illegible] (LUMP)									[illegible]
CLASS II									
INDIVIDUAL [illegible], KITS, [illegible]									[illegible]
CLASS III									
[illegible] BULK [illegible]									[illegible]
[illegible]									[illegible]

TABLE [illegible] — MARITIME PREPOSITIONED SHIPPING MARINE EXPEDITIONARY BRIGADE (MPS MEB)[1]
([illegible])

CLASS IV	
CONSTRUCTION MATERIALS (LUMP)	[illegible]
CLASS V	
AMMUNITION [illegible]	$[illegible]
[illegible]	$[illegible]
CLASS [illegible]	
MEDICAL SUPPLIES (LUMP)	$[illegible]
CLASS [illegible]	
REPAIR PARTS/[illegible] (LUMP)	$[illegible]
AVIATION GRND [illegible] (LUMP)	$[illegible]
[illegible] (LUMP)	$1,[illegible]
CARE IN STORE MATERIALS (LUMP)	[illegible]
PUBLICATIONS (LUMP)	[illegible]
[illegible] (LUMP)	[illegible]
[illegible] SPT ELEMENT EQUIP/SUPP (LUMP)	$[illegible]

1/ A Marine Expeditionary Brigade is task-organized to accomplish a specific mission/perform in a given geographical area. A MEB is not standard. For contingency

planning purposes, a "notional" MEB is used. There are two types, the Maritime Prepositioned Ship (MPS) MEB and the amphibious MEB. The MPS MEB represents a MEB that would deploy by air and marry up with the equipment aboard the MPS ships. An Amphibious MEB consists of a force with its T/E equipment that would normally deploy by ship. The MEB presented here is based on the "notional" MPS MEB. Because the information provided is based upon contingency planning, the cost data provided is intended to only by used in very broad planning scenarios. It is not intended to provide definitive costs. All costs are in thousands of dollars. Totals may not add due to rounding.

2/ Based on FY90 annual workyear rates of $59,116 and $24,971 for USMC officers and enlisted, respectively.

3/ Based on FY90 annual workyear rates of $63,761 and $27,408 for USN officers and enlisted, respectively.

4/ The prescribed allowance of equipment for an organization. This includes both unit and individual equipment. Equipment costs are based upon the total T/E of a given unit. Units that are reinforced are costed by including a percentage of the value of the attachment’s parent’s T/E, based upon the number of personnel (attached units parent T/E divided by parent T/O times the number of personnel in the attachment). Detachments are likewise costed as a percentage of the value of the parent’s total T/E, determined the same way as attachments. Since the size of the detachment is determined by the mission requirements of the unit it is attached to, the detachments shown here represent a "notional" detachment, based upon past practices with detachments of a given type.

5/ Miscellaneous material is loaded on board the MPS to support the MEB as a whole. It is not unit specific and may or may not be purchased with Marine Corps appropriations. In each case listed, the Service appropriation used to purchase the material is specified (USMC, USN, etc.).

DATA SOURCE: Based on T/O, dated April 1989; the President’s FY90/91 Budget Submit; the Marine Corps Logistics Management Information System, and CMC Central Reference Material Library

OPR: T/O Information - CMC (Code MPC) Phone (703) 614-8381
T/E Information - USMC funded - CMC (LPP-4) Phone (703) 696-0900, AUTOVON 226-0900

USN funded - CMC (App-41) Phone (703) 614-2261, AUTOVON 224-2261

Table 6B3. — [illegible] MARINE [illegible] EXPEDITIONARY [illegible] (ARF)[1]
(FY93 - $000)

TYPE ORGANIZATION[2]	UNIT RQMT	T/O#	USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL O&M[3]	COSTS [illegible][4]	EQUIPMENT COST [illegible][5]
NOTIONAL MEF COMPOSITION[6]	1		3,217	40,00[illegible]	[illegible]	2,105	[illegible]	$25,836	$1,[illegible]
COMMAND ELEMENT	1		224	1,880	12	41	$40,167	$2,244	$36,342
HQ, MEF	1	[illegible]	22	66	7	6	$5,654	$611	$872
[illegible]	1	[illegible]	5	107	2	7	$3,213	$219	$2,[illegible]
SRI GROUP	1	[illegible]	115	1617	6	25	$42,361	$1,095	$27,525
[illegible]	1	[illegible]	3	199	1	0	$2,301	$0	$1,021
CIVIL AFFAIRS GRP	1	[illegible]	25	71	3	1	$3,424	$219	$851
GROUND COMBAT ELEMENT	1		1,065	17,224	75	672	$492,905	$20,502	$[illegible]
HQ BN, DIV	1	[illegible]	122	1065	7	22	$32,455	$1,321	$26,[illegible]
INF REGT ([illegible])	3		156	2078	11	275	$91,[illegible]	$1,[illegible]	$75,[illegible]
ARTY REGT	1	[illegible]	253	3577	14	78	$[illegible]	$5,266	$[illegible]
ASLT AMPH BN	1	[illegible]	[illegible]	[illegible]	1	21	$[illegible]	$[illegible]	$[illegible]
LAI BN	1	[illegible]	35	766	3	22	$21,[illegible]	$2,006	$65,[illegible]
CBT ENGR BN	1	[illegible]	45	016	2	15	$22,025	$527	$20,127
RECON BN	1	[illegible]	37	361	2	37	$11,055	$1,005	$9,[illegible]
TANK BN	1	[illegible]	44	821	2	17	$23,102	$592	$[illegible]
AVIATION COMBAT ELEMENT[7]	1		1,455	12,742	85	217	$406,147	$11,244	$236,[illegible]
MAW COMMAND ELEMENT	1		178	357	9	8	$15,[illegible]	$793	$2,952
HQ, MAR AIRCRAFT WING	1	[illegible]	54	265	4	7	$11,[illegible]	$[illegible]	$261
MAR WING HQ SQDN	1	[illegible]	12	63	1	1	$2,165	$91	$2,627
MAR WING [illegible] UNIT	1	[illegible]	4	45	0	1	$1,[illegible]	$4	$165
MAR AIR CONTROL GROUP (MACG)	1		244	2,561	6	24	$78,645	$1,[illegible]	$[illegible]
MACG HQ	1	[illegible]	15	27	4	5	$1,445	$227	$7,[illegible]
MAR TACT AIR CMD [illegible]	1	[illegible]	12	124	1	2	$2,[illegible]	$55	$178
MAR AIR TRAFFIC CONT SQDN	1	[illegible]	24	209	1	2	$6,575	$55	$1,[illegible]
MARINE [illegible]	1	[illegible]	35	502	1	0	$15,502	52	$16,[illegible]
MAR AIR CONT SQDN	2	[illegible]	24	217	1	3	$7,[illegible]	$[illegible]	$58,[illegible]
MARINE AIR SPT SQDN	1	[illegible]	44	222	1	5	$6,1[illegible]	$52	$17,[illegible]
[illegible]	[illegible]	[illegible]	2[illegible]	352	1	1	$10,2[illegible]	$112	$15,[illegible]
LIGHT ANTI AIR MISSILE BN [illegible]	1	[illegible]	31	574	2	1	$16,[illegible]	$[illegible]	$[illegible]
MAR WING SUPPORT GROUP (MWSG)	1		125	2,565	22	54	$71,[illegible]	$5,[illegible]	$65,152
H&S SQDN	1	[illegible]	15	55	2	1	$2,[illegible]	$[illegible]	$417
MAR WING SPT SQDN FW	2	[illegible]	25	679	9	27	$16,455	$[illegible]	$16,[illegible]
MAR WING SPT SQDN RW	2	[illegible]	27	505	5	22	$16,[illegible]	$[illegible]	$[illegible]
MARINE AIR GROUP (HELO)(MAG)			555	3,799	25	5	$112,[illegible]	$2,[illegible]	$20,[illegible]
MAG HQ	2	[illegible]	24	77	5	5	$2,252	$455	$[illegible]
MAR AVN LOG SQDN	2	[illegible]	27	751	1	1	$7,[illegible]	$[illegible]	$1,[illegible]
MAR [illegible] SQDN [illegible]	1	[illegible]	35	155	1	1	$[illegible]	$[illegible]	$[illegible]
MARINE [illegible]	2	[illegible]	25	155	1	1	$17,[illegible]	$175	$[illegible]
MARINE MED HELO SQDN (HMM)	5	[illegible]	32	173	1	3	$6,212	$[illegible]	$[illegible]
MARINE HVY HELO SQDN (HMH)	2	[illegible]	31	235	1	5	$8,[illegible]	$[illegible]	$[illegible]
MARINE [illegible] HELO SQDN [illegible]	1	[illegible]	31	117	1	1	$[illegible]	$[illegible]	$[illegible]
MARINE AIR GROUP (FIXED WING)	1		452	3,521	25	11	$126,575	$2,817	$[illegible]
MAG HQ	2	[illegible]	25	77	5	5	$4,252	$415	$[illegible]

TABLE 5A2L – NOTIONAL MARINE CORPS EXPEDITIONARY FORCE (MEF)[1]
(FY90 – $000)

ORGANIZATION[2]	UNIT QTY	T/O#	USMC OFF	USMC ENL	NAVY OFF	NAVY ENL	ANNUAL WAGES[3]	COSTS NAVY[4]	EQUIPMENT COST[5]
[illegible]	3	[illegible]	26	282	[illegible]	5	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	25	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	315	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	5	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	2	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	2	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	
COMBAT SERV SPT ELEMENT			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEDICAL BN, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DENTAL BN, [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
NAVAL SUPPT FORCES[10]			0	0	[illegible]	[illegible]	$0	[illegible]	0
NAVAL MOBILE CONST BN	1		0	0	[illegible]	[illegible]	$0	[illegible]	0
[illegible]	1		0	0	[illegible]	[illegible]	$0	[illegible]	0
MOBILE INSHORE UNDERSEA WARFARE	1		0	0	[illegible]	[illegible]	$0	[illegible]	0
[illegible] STAFF	1		0	0	[illegible]	[illegible]	$0	[illegible]	0
NAVAL BEACH GROUP	1		0	0	[illegible]	[illegible]	$0	[illegible]	0
MISC, NAVAL SPT UNITS[11]	1		0	0	[illegible]	[illegible]	$0	[illegible]	0

1/ The structure depicted is a "Notional" Marine Expeditionary Force; for continuity, the structure of the Second Marine Division has been used.
2/ Principle-type organizations are listed starting at the left margin; subordinate-type organizations or units, if any, are indented.
3/ Based on FY-90 annual composite workyear rates for USMC officers $59,116 and enlisted $24,971.
4/ Based on FY-90 annual workyear rates of USN officers $63,761 and enlisted $27,408.
5/ The prescribed allowance of equipment for an organization includes both unit and individual equipment procured with Marine Corps funds. It does not include equipment procured with Navy appropriations. It also includes annual maintenance cost for individual equipment ($448 per set).
6/ Organization of a MEF and its composition is mission dependent, and units are assigned to the various landing echelons at the discretion of the Commander. This table presents a notional MEF with no consideration being given to which landing echelon a unit may be assigned.
7/ The Second SRI Group is used as the "norm". Because a MEF and an SRI Group are task-organized, and the SRI Group's provides intelligence data to the commander, the entire SRI Group is included.
8/ Aviation unit Table of Equipment costs do not include the cost of equipment procured with Navy Appropriations ("Blue Dollars"). See Table 5A2B for blue dollar costs.
9/ The Marine Air Control Squadron is shown at the planned manning level of 23/237, vice the T/O of 30/186.
10/ These naval forces are not formally a part of the MEF but would be assigned in support.
11/ Includes Det, FLTCDRGRU, UDT, SEALS, EOD, SAR, AMDM and

medical personnel.

Data Sources: HQMC Logistics Management Information System data base (Equipment Allowance File and Item Data File) dated July 1990; FY90 Workyear Averages from the President's FY90 Budget; Table of Manpower Requirements for FY90; the FY 1990 Troop List

OPR: Personnel Info - Ground - Combat Element: MCCDC (WF), Phone (703) 614-2505, AUTOVON 224-2505
Air: CMC (ASM), Phone 614-1392, AUTOVON 224-1392
Support: CMC (LPM), Phone (703) 614-1932, AUTOVON 224-2473
Equipment Info - CMC (LMO-3), Phone (703) 614-5394, AUTOVON 224-5394

CHAPTER 7

COST COMPARISONS AND PROJECTIONS

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MARINE CORPS COST FACTORS MANUAL

CHAPTER 7

COST COMPARISONS AND PROJECTIONS

7000. GENERAL

1. This chapter provides data pertaining to cost comparisons and projections. Such analyses are often complex because, to be complete and accurate, the element of time must be considered. For example, price changes due to inflation (or deflation), the charge for the use of money (e.g., interest), and investment payback (i.e., return on investment) are all related to the passage of time.

2. The information here is presented in two sections as follows:

A. Cost Adjustments (for deflation/inflation and the time value of money).

B. Investment Payback.

The characteristics and specific use of the data is included in each section. Footnotes on data formulation, sources, and OPR are included with each table, as appropriate.

3. For further information and guidance on cost analysis, consult the current edition of MCO 7000.12, Economic Analysis, and related DoD and DON directives.

CHAPTER 7

COST COMPARISONS AND PROJECTIONS

SECTION A: COST ADJUSTMENTS

7100. INTRODUCTION. The cost adjustment factors contained in this section pertain to inflation and the time value of money. These factors were developed and refined by economists, accountants, statisticians, and financial analysts to account for time-related phenomena which should be considered in cost analyses. They are important considerations because time has monetary value, usually expressed in terms of percentage rates of return or interest rates.

7101. DATA USE

1. Table 7A1, Cost Deflators/Inflators

a. This table is used to adjust cost figures in different

years for the effects of inflation. These deflators and inflators apply to cost figures which reflect funds available for programming in a given year (i.e., total obligational authority) as opposed to actual expenditures (i.e., outlays). Since most Marine Corps dollars are expended in 1 year, this difference is usually not significant. However, if precise calculations are needed, especially in areas involving the Procurement, Marine Corps (PMC) and Research, Development, Test, and Evaluation (RDT&E) appropriations, inquiries should be made to the OPR of this table for guidance/help.

b. The factors in the tables are furnished for major cost components from FY50 through FY94, with FY91 being the base year. Factors are different for the various appropriations because inflation is not constant across the entire economy but varies by sector.

c. The table can be used in two different ways as follows: (NOTE: All years are fiscal years.)

(1) Converting from base year (1991) cost to any other fiscal year cost. This option is used if the analyst knows the cost of an item in base year dollars and wishes to know that cost expressed in terms of prior or future fiscal year dollars. The procedure involves multiplying the base year cost by the prior or future fiscal year factor in the applicable appropriation column (see Table 7A1).

(2) Converting from any fiscal year cost (other than base year) to any other fiscal year cost. This option is used if the analyst wishes to compare the real change in costs between two fiscal years other than the base year. For example, O&M service costs for a telecopier were $400 in FY67 and $500 in FY75. In order to determine in which year the true cost (adjusted for inflation) is the lower, the comparison may be made in either of the following ways:

(a) Converting costs to base year dollars. Since the table is already in base year (1991) dollars, this process is the easiest. Divide the 1967 cost by the 1967 factor to get the cost in 1967 dollars. Do the same for the 1975 cost. A comparison of these figures shows the 1975 true cost is less (see Table 7A1).

(b) Converting cost to other fiscal year dollars. The conversion can be made and expressed in terms of either fiscal year being compared. The mathematical operation is the same in both instances and is illustrated as follows:

1 In 1967 Dollars. To make 1967 the base year

with an index value of 1.000 and to make all other factors expressed in terms of that base year, divide the relevant factors in the table by the 1967 factor. In this example, divide the 1975 O&M dollar conversion factor by the 1967 factor (.4376/.2103 = 2.0808). The result means one O&M dollar in 1967 is the equivalent of about two and one-tenth of the 1975 dollars. The 1975 cost of $500 should be divided by a conversion factor of 2.0808 for a result of $240. In other words, the 1975 O&M cost of $500 expressed in 1967 dollars is $240, which is $160 less than the 1967 cost of $400.

2 In 1975 Dollars. The process is exactly the same as the previous example, except you divide by the 1975 factor.

NOTE: Both of the methods described above are valid ways of comparing costs after adjustment for inflation. Each give the same result (i.e., the 1975 cost was cheaper). However to be clear about the amounts involved, the base year must be specified along with the amount.

2. Table 7A2 (Present Value/Discount Factors)

a. This table can be used to remove the effects of the time value of money on costs by reducing cash flows, occurring in different periods, to a common point in time. This applies to flows of actual cash (outlays) and not to items such as appropriations, allocations, or depreciation where no actual cash flow takes place. If the levels of cash flow vary, column A of the table should be used; if cash flow is the same each year, column B is applicable. (Column B is the sum of column A up to and including the "project year." See Table 7A2 for examples.) It is important to note these calculations assume deflated dollars; i.e., with the effects of inflation eliminated. Inflation and the time value of money are separate phenomena.

1/ Base year is FY 1991. The base year can be changed by dividing all the index numbers in the series by the index number of the year the analyst decides to make the base. The introduction to this section explains the use of this table.

2/ These indices are DoD averages and not specifically for the Marine Corps.

3/ "O&M OTHER" is O&M excluding fuel and civilian pay.

4/ These indices are for Marine Corps (or Navy) appropriations specifically.

5/ This column is used when the appropriation is not known. Composite factor includes retired pay.

6/ The GNP deflator is included for information. It should only be used for items related to the U.S. economy as a whole and which do not fit into appropriation categories.

Note: With the exception of the PMC, all appropriations have components; i.e., pay, POL and purchases, which escalate/inflate at different rates. When costing, the most applicable column, either component or appropriation, should be used.

Data Source: Office of the Comptroller of the Department of Defense, "National Defense Budget Estimates for FY 1991", March 1990. GNP & CPI are taken from Table 5-1, "DoD and Selected Economy Wide Indices." All other indices are taken from Tables 5-4 and 5-5, "Department of Defense Deflators - TOA."

OPR: CMC (Code RPP-5) Phone (703) 614-1503, AUTOVON 224-1503

FAMILY TAX - PRESENT VALUE/DISCOUNTED FACTORS[1]

	COLUMN A[2]	COLUMN B[1]		COLUMN A[2]	COLUMN B[1]
ANNUAL YEAR	ANNUAL PRESENT VALUE OF $1.00	CUMULATIVE PRESENT VALUE OF $1.00	INCLUDED TAX	ANNUAL PRESENT VALUE OF $1.00	CUMULATIVE PRESENT VALUE OF $1.00
1	0.953	0.953	14	0.276	7.724
2	0.867	1.820	15	0.251	7.975
3	0.788	2.607	16	0.228	8.203
4	0.717	3.324	17	0.208	8.416
5	0.652	3.977	18	0.189	8.605
6	0.592	4.569	19	0.172	8.777
7	0.538	5.108	20	0.156	8.933
8	0.489	5.597	21	0.142	9.075
9	0.445	6.042	22	0.129	9.205
10	0.405	6.447	23	0.117	9.322
11	0.368	6.815	24	0.107	9.429
12	0.334	7.149	25	0.097	9.526
13	0.304	7.453			

/1 The factors in this table are based on continuous compounding of interest. A discounted rate of 10 percent is used per SECNAVINST 7000.14b.

/2 Factors represent an arithmetic average of each year’s

respective present value future. This column should be used when funding is different each year.

/3 Factors represent the sum of the factors in Column A through any given project year. This column should be used when funding is the same each year.

TECHNICAL NOTE:

The values in column A were derived as follows:

$$\text{Factor in project year } n = \frac{\frac{1}{(1.1)(n)} + \frac{1}{(1.1)(n-1)}}{2}$$

The values in column B were derived as follows:

$$\text{Factor in project year } n = \sum_{x=1}^{(n)} \frac{1}{(1.1)(x)} + \frac{1}{(1.1)(x-1)}$$

Data Source: SECNAVINST 7000.14B
OPR: CMC (FDB-P&R), Phone (703) 614-2206, AUTOVON 224-2206

CHAPTER 7

COST COMPARISONS AND PROJECTIONS

SECTION B: INVESTMENT PAYBACK

7200. INTRODUCTION

1. Investment payback pertains to the stream of cash proceeds (i.e., savings) produced by an investment. The payback period is the length of time required for such proceeds to equal the original cash outlay required by the investment. In other words, when the savings/investment ratio is equal to 1.0, all costs (but no more) of an investment have been recovered; the payback period is the length of time required for that to occur.

2. The savings/investment ratio is a numerical relationship of future savings (discounted to the present) divided by

investment costs (refer to "Present Value" in the glossary). It is a useful ratio when comparing alternatives because it indicates the effectiveness of additional investment to produce future cost savings.

3. The table in this section provides conversion factors regarding savings/investment ratios and discounted payback periods.

7201. DATA USE. Table 7B1, Investment Payback, can be used to determine the number of years it would take, on a discounted basis, to recover an investment at various rates of cost effectiveness. For example if it is anticipated the purchase of a vehicle would result in a particular rate of payback (i.e., savings to investment ratio or return on investment), it is possible to determine from the table the number of years it would take before the savings accrued equaled the investment cost. This determination can be made by correlating the given savings to investment ratios, in the left-hand column of the table, with their corresponding discounted payback periods. Refer to Table 7B1 for an illustration of the table’s use.

7202. ALTERNATIVE METHODS. The concept of net present value (NPV) is sometimes used instead of investment payback. The NPV of a project is the total discounted benefits of a project minus its total discounted costs. The higher the NPV, the more attractive the project. This alternative method and others are discussed in the current edition of MCO 7000.12 and related Department of the Navy and Department of Defense directives.

TABLE 7B1 INVESTMENT PAYBACK[1]

SAVINGS TO INVESTMENT RATIO	PAYBACK PERIOD				
	5 YRS	10 YRS	15 YRS	20 YRS	25 YRS
	CORRESPONDING DISCOUNTED PAYBACK PERIODS				
1.1	2.0	10.0	15.0	20.0	25.0
1.2	4.43	8.45	12.34	15.0	16.5
1.3	3.96	7.22	10.24	12.97	14.52
1.4	4.67	8.71	9.71	11.15	12.57
1.5	4.31	6.96	9.29	9.70	10.72
1.6	3.06	5.93	7.57	8.0	9.75
1.7	2.84	5.38	5.77	7.01	8.74
1.8	2.65	5.07	5.22	7.29	8.13
1.9	2.53	4.73	5.75	6.75	7.26
2.0	2.55	4.7	5.37	6.26	6.73
2.1	2.7	5.15	5.07	5.82	6.25
2.2	2.31	3.45	5.72	5.37	5.94
2.3	1.93	3.44	4.46	5.13	5.56
2.4	1.75	3.75	4.27	4.88	5.27
2.5	1.5	2.7	4.3	4.0	4.59
2.6	1.75	3.25	3.87	4.37	4.72
2.7	1.65	2.97	3.45	3.76	4.21
2.8	1.57	2.7	3.47	3.87	4.3
2.9	1.55	2.7	3.35	3.8	4.11
3.0	1.47	2.5	3.15	3.47	3.95
3.1	1.42	2.4	3.17	3.7	3.70
3.2	1.37	2.32	2.75	3.37	3.65
3.3	1.37	2.24	2.85	3.05	3.5
3.4	1.28	2.16	2.75	3.15	3.37
3.5	1.24	2.15	2.55	2.97	3.24
3.6	1.2	2.05	2.37	2.82	3.15
3.7	1.15	1.97	2.45	2.75	3.05
3.8	1.12	1.91	2.45	2.72	2.95
3.9	1.1	1.85	2.35	2.66	2.85
4.0	1.07	1.8	2.27	2.58	2.73
4.1	1.04	1.75	2.21	2.5	2.7
4.2	1.02	1.64	1.94	2.2	2.55
4.3	1.02	1.62	1.74	2.06	2.1
4.4	1.00	1.56	1.59	1.75	1.97
4.5	0.98	1.52	1.48	1.67	1.72
4.6	0.93	1.46	1.41	1.47	1.59
4.7	0.96	0.96	1.31	1.41	1.55
4.8	1.62	1.0	1.45	1.55	1.53
4.9	0.91	0.86	1.15	1.19	1.25
5.0	0.90	0.79	0.98	1.11	1.15
5.2	0.85	0.76	0.91	1.05	1.07
5.5	0.75	0.7	0.88	0.95	1.0
10.0	0.41	0.07	0.07	0.07	1.0

1/ This table is based upon a discount rate of 10 percent. It indicates the number of years it would take to recover an investment on a discounted basis over the economic life of the equipment/property at various savings/investment ratios. For example, if it is anticipated the purchase of a vehicle will have a savings-to-investment ratio of 1.5 to 1 (see 1.5 in the left-hand column above) over its 5 year economic life. The discounted payback period would be 3.06 years. The savings accrued in the 3.06 years of use would equal the investment cost.

Data source: Department of the Navy, Economic Analysis Handbook p. 442.

SOURCES OF MARINE CORPS SUPPORT AND FUNDING

1. When a cost estimate is being developed or used, it must be remembered the validity and usefulness of the estimate depends upon the parameters under which it is being developed. To ensure a cost estimate is computed and correctly applied, it is essential planners, programmers, and decisionmakers are familiar with each of the following sources of Marine Corps funding and support:

A. MARINE CORPS APPROPRIATIONS. The Marine Corps receives funds directly from the following appropriations:

(1) Military Personnel, Marine Corps (MPMC). Funding provided by the annual MPMC appropriation covers the expense of Permanent Change of Station Moves (PCS), pay and allowances, individual clothing issues, the Government's contribution to the Federal Insurance Compensation Act Program, death gratuities and the apprehension of military deserters, absentees, and escaped military prisoners.

(2) Reserve Personnel, Marine Corps (RPMC). The annual RPMC appropriation provides for pay, allowances, clothing, subsistence, gratuities, travel, and related expenses for personnel of the Marine Corps Reserve on active duty under 10 U.S.C. 265 or while undergoing Reserve training, drills, or equivalent duty. Also included under this appropriation are the foregoing type expenses as related to the Marine Corps Platoon Leaders and Junior Reserve Officer Training Course (JROTC) programs.

(3) Operation and Maintenance, Marine Corps (O&MMC). This annual appropriation funds supply and maintenance activities, base telecommunications, training and education, recruiting and advertising, personnel support administration, Marine Corps-furnished field and garrison subsistence, and base operations. Examples of items funded within the O&MMC appropriation include such diverse things as the salaries and fringe benefits of Marine Corps civilian personnel, maintenance of equipment and facilities, utilities, Temporary Additional Duty (TAD), supplies, and the procurement of equipment which is either not centrally managed and/or below the current unit cost dollar limits for Procurement Marine Corps funding.

(4) Operation and Maintenance, Marine Corps Reserve (O&MMCR). The annual O&MMCR appropriation covers the operation and maintenance of the Marine Corps Reserve. Specifically, it pays for such things as the training, organization, and administration of the Marine Corps Reserve; repair of facilities and equipment; travel and transportation; civilian personnel; and procurement of services, supplies, and equipment.

(5) Procurement Marine Corps (PMC). The multiyear PMC

appropriation provides funding for the purchase, delivery, and modification of those investment items which are centrally managed and/or exceed the current unit cost dollar limits for

O&MMC funding. These items include such things as ammunition, weapons, tracked combat vehicles, guided missiles, communications and electronic equipment, engineering and other support equipment, and spares.

(6) Family Housing, Appropriation. Since FY83, this appropriation has funded the construction, maintenance, and operation of Government-owned family housing and associated maintenance and personnel support facilities assigned to the Marine Corps.

(7) Military Construction (MILCON). The MILCON appropriation funds such things as the acquisition of land, construction of facilities valued in excess of $100,000 and the implementation of public works projects for the Marine Corps. Additionally, funds are provided through this appropriation for the acquisition of naval hospital complexes to serve military personnel and their dependents aboard Marine Corps installations.

(8) Military Construction, Navy Reserve (MCNR). MCNR supports constructing, acquiring, expanding, rehabilitating, and converting facilities for the training and administration of Marine Corps Reserve components.

B. Revolving Funds. The Marine Corps is supported by three revolving funds. All three of these funds will be consolidated into the Defense Business Operations Fund (DBOF) in FY 1992.

(1) Marine Corp Stock Fund (MCSF). The MCSF is used to procure inventories of expense-type items, as contrasted to investment-type items which are furnished by the PMC appropriation. When these items are issued to Marine Corps activities, a charge is made to the operating funds of the receiver and a reimbursement made to the MCSF. Examples of stock fund items are Petroleum, oil,and lubricants (POL) for ground equipment, cleaning supplies, paints, office supplies, and some spare parts. The only exception to the revolving fund aspect of the MCSF is the small amount of funds directly appropriated in recent years for procurement of prepositioned war reserve (PWR) material.

(2) Marine Corps Industrial Fund (MCIF). The MCIF provides capital to finance the operations of the overhaul and repair facilities of the Marine Corps Logistics Bases, Albany

and Barstow. The capital is replenished by funds received as a result of periodic billings to customer activities for whom the work was performed. Overhaul and repair charges consist of labor, material, and overhead.

(3) Marine Corps Commissary Trust Revolving Fund (MCCTRF). The MCCTRF is used to pay the expenses of constructing, equipping, and maintaining commissary stores. It is also used to cover the costs of commissary operations except for personnel, which is funded through the O&MMC appropriation. The fund is supported by commissary store profits generated by the sale of store stock derived from MCSF transactions. This fund will be transferred to the Defense Commissary Agency (DeCA) in FY 1992 and further consolidated into the DBOF.

C. Nonappropriated Funds. These are generated by Marine Corps nonappropriated fund resale activities such as exchanges, clubs, messes, recreational facilities, and civilian cafeterias. The Marine Corps uses these funds to support morale, welfare, and recreation programs.

D. Other Appropriations. The Marine Corps receives support from the following non-Marine Corps appropriations:

(1) Retired Pay, DoD. The retired pay of Regular and Reserve Marine Corps personnel is funded through this appropriation.

(2) Claims, DoD. This appropriation funds validated claims against the Marine Corps, such as those based on damage to private property and injury to non-Government personnel.

(3) Military Personnel, Navy (MPN) and Reserve Personnel, Navy (RPN). These appropriations fund personnel expenses, such as pay and allowances of Navy and Navy Reserve personnel assigned to the Marine Corps and Marine Corps Reserve in the medical, dental, chaplain, and other such fields and some personnel associated with Marine Corps-related RDT&E efforts.

(4) Operation and Maintenance, Navy (O&MN). Through the O&MN appropriation, the Navy funds the operation and maintenance of Marine Corps aircraft ground support equipment which directly supports the aircraft and naval hospital complexes that serve military personnel and their dependents aboard Marine Corps installations.

(5) Operation and Maintenance, Navy Reserve (O&MNR). With the O&MNR appropriation, the Navy funds the operation and maintenance of Marine Corps Reserve aircraft and ground support equipment which directly supports such aircraft.

(6) Aircraft Procurement, Navy (APN). Through the APN appropriation, the Navy funds Marine Corps aircraft, aircraft modification, support equipment, and initial and replenishment spare parts procurement.

(7) Weapons Procurement, Navy (WPN). The WPN appropriation funds aircraft carried weapon systems required by the Marine Corps, such as the Sparrow, Sidewinder, and airborne Tow and associated support items, such as aerial targets and replenishment spares.

(8) Other Procurement, Navy (OPN). Navy funding from the OPN appropriation covers the procurement of such Marine Corps items as communication security, nontactical air traffic control communications equipment, and aircraft ordnance.

(9) Research, Development, Test, and Evaluation, Navy (RDT&E,N). This appropriation covers Marine Corps-managed RDT&E efforts, such as those involved in the landing vehicle tracked (experimental), some Marine Corps data systems, and

selected joint tactical communications programs. It also covers the Marine Corps' share of Navy-managed joint weapon system programs such as V/STOL development.

(10) Military Personnel, Air Force (MPAF). This appropriation supports the Marine Corps by providing veterinary services at major installation. These services include the nonreimbursable inspection of meat and dairy products for Government messes and commissaries and the reimbursable care of pets belonging to military personnel and their dependents.

E. Other Support. The Marine Corps receives various support from other sources, such as the ones listed below:

(1) Nonreimbursable Training Support. The Marine Corps receives nonreimbursable training support from the other military services. Most of this support is the result of course consolidations effected by the Interservice Training Review Organization and other agreements. For instance, the Navy hosts virtually all aviation and most cryptographic courses, the Army hosts all formal Marine Corps tank, artillery, and improved HAWK training, and the Air Force hosts courses in meteorology and aerial navigation.

(2) Nonreimbursable Operational Support. The other military services, mainly the Navy, provide operational support to the Marine Corps on a nonreimbursable basis. For instance, the Navy, as part of the Navy/Marine Corps team, provides

construction and logistic support units to reinforce Marine Corps assets during amphibious operations.

(3) Administrative assistance. The Marine Corps receives assistance in the administrative aspects of material procurement from the General Services Administration (GSA), the Defense Logistics Agency (DLA), and the Navy, Army, and Air Force.

(4) Educational Assistance. The Department of Education reimburses the Marine Corps for the costs of dependents' schools on various Marine Corps installations. Reimbursable costs include salaries and the construction, operation, and maintenance of facilities. Teachers, however, are counted against the Marine Corps civilian personnel end-strength ceilings.

APPENDIX B

LIFE CYCLE COST

1. GENERAL. There is a tendency for decisionmakers in evaluating alternative means of satisfying a given requirement to select those items that have the lowest investment cost. The reasons for this appear to be that investment costs are (1) usually more visible than other costs, and (2) greater than development costs. Ironically, operating and support costs, which are usually greater than investment costs, are often ignored or given little significance. In order to minimize this tendency and to give visibility to outyear "tails" attached to current investment decisions, the concept of Life Cycle Cost (LCC) has been adopted by the DoD.

LCC is the total amount of expenditures directly or indirectly associated with a system or item of equipment throughout its development and economic life. These expenditures include research, development, test, and evaluation (RDT&E); investment; and operating and support costs. By considering LCC, a decisionmaker can improve the decisions related to systems acquisition.

2. MINIMIZING LCC. In order to make a proposed system more affordable, project officers and decisionmakers should ensure that LCC is minimized for a given (required) level of effectiveness. There are numerous means of accomplishing this. For instance, analysts can frequently:

a. Effect tradeoffs among such things as desired performance levels and item characteristics. In some cases, this may necessitate the modification of the system's required operational capability documentation.

b. Improve design to:

(1) Reduce the expense of each item to be procured.

(2) Increase the effectiveness of each item, which in turn could reduce the number of each item required.

(3) Use components common to items already in the inventory.

(4) Reduce the frequency, extent, and cost of repair.

(5) Reduce the required number, grade, and proficiency level of operator and maintenance personnel.

(6) Extend the expected economic life of the item, thereby reducing its average annual cost of investment.

c. Consider alternatives to the system under consideration as LCC's are considered.

3. METHODOLOGY. The Marine Corps has two cost models which aid in the development of realistic LCC estimates.

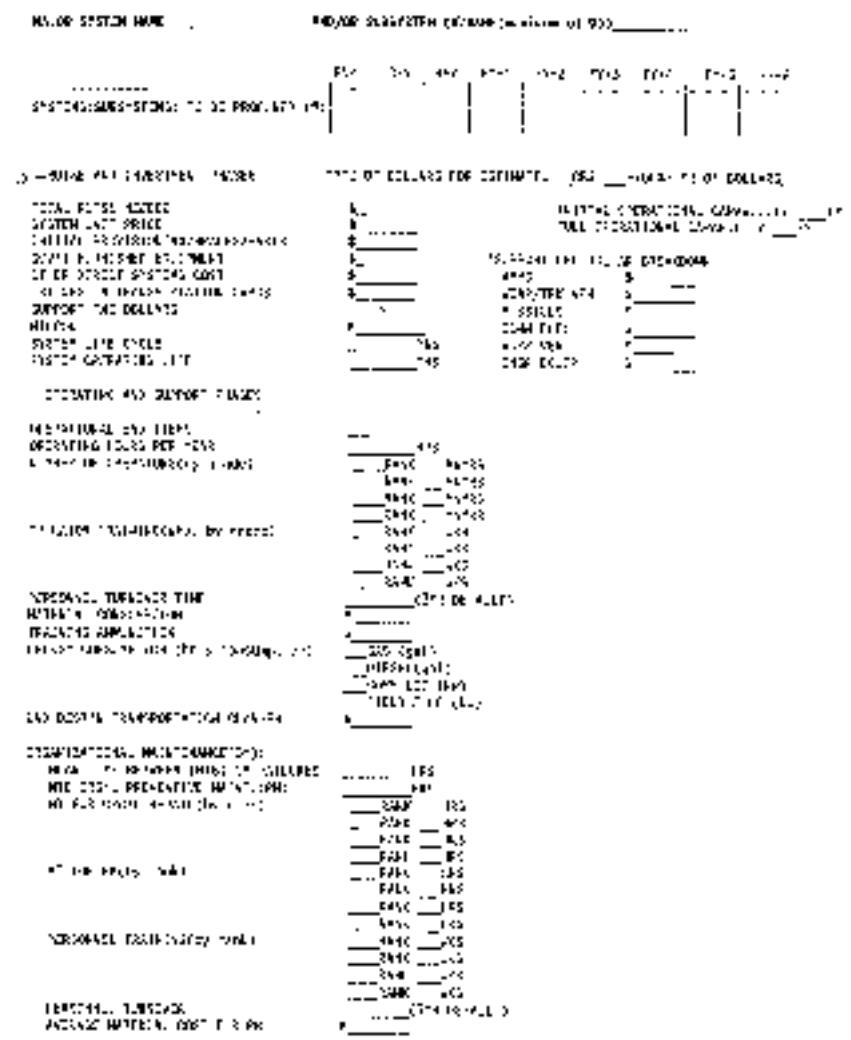
a. Marine Corps Cost Analysis Strategy Assessment (MCCASA) Model. A complete, flexible model which requires detailed data input. It can be used at any level in the acquisition cycle, but is most applicable as a project matures and detailed project data becomes known.

b. Summary Version Life Cycle Cost (SVLCC) Model. A simplified costing approach which is used (1) primarily in the earliest stages of project development, and (2) for POM initiative documentation of total outyear LCC's. The level of data detail required to run the model is more simplified in comparison to the MCCASA Model.

The MCCASA and SVLCC Models allow Marine Corps personnel to produce cost estimates based on a standardized methodology. This, in turn, allows decisionmakers to compare cost estimates of various programs. The data required to produce these estimates begins with the input to the SVLCC Model (see Figure B-1). This data is not extensive, but gathering it enables Marine Corps personnel to become familiar with costing terms and data sources. Cost factors (i.e., dollar escalators,

personnel and training costs, etc.) to both models are updated annually. Copies of the programs are available upon request (MCRDAC (PSA-R) 640-2420/3633 AUTOVON 278-2420/3633).

B-1 MAJOR DATA ELEMENT INPUTS
SUMMARY VERSION LIFE CYCLE COST MODEL (SVLCCM)



MARINE CORPS COST FACTORS MANUAL

APPENDIX C

GLOSSARY

PURPOSE. This glossary is designed to define and explain a broad collection of terms pertaining to the whole spectrum of financial planning, programming, cost estimating, and economic analysis, particularly as they pertain to the Federal Government. Terms included are not limited to those appearing in this Manual, albeit a special effort had been made to emphasize the area for factors. A number of budgetary terms have been included in the glossary because their use is prevalent in Government financial management. However, most of the computed figures in this Manual do not, in fact, relate to

those in Marine Corps budgets and are not suitable for use in budget formulations. Terms defined or explained in the text of this Manual and/or in tables may not be repeated herein.

USE. This glossary should serve as a convenient reference and, with careful reading, will enhance the understanding and usefulness of this Manual. To derive maximum utility from this Manual, the analyst should be totally familiar with all the terms, phrases, and concepts in the glossary and know how they relate to each other and to cost factors. Every user of this Manual, even the experienced cost analyst, will gain insight from a perusal of this glossary.

FORMAT. Terms in this glossary are organized alphabetically. If a term pertains to a particular part of this Manual, a reference is made by chapter and, where applicable, by section and table. When terms interrelate, such as in the case of "Average," "Mean," "Median," and "Mode," they are cross-referenced. Every effort has been made to simplify and clarify the explanation of complex terms and concepts. To this end, examples are freely employed.

ACQUISITION: The process for obtaining systems, equipment, or modifications to existing inventory items.

ACQUISITION RISK: The chance that some element of an acquisition program produces an unintended result with an adverse effect on system effectiveness, suitability costs, or availability for deployment.

ACTUAL COST: A cost sustained in fact, on the basis of costs incurred, as distinguished from forecasted or estimated costs.

ACTUAL DOLLARS: Expenditures as recorded in prior time periods.

ALLOCATION: An authorization by a designated official of the DoD to make funds available within a prescribed amount to an operating agency for the purpose of making allotments; i.e., the first subdivision of an apportionment.

ALLOTMENT: The authority, expressed in terms of a specific amount of funds granted by competent authority to commit, obligate, and expend funds for a particular purpose. Obligation and expenditure of funds may not exceed the amount specified in the allotment, and the purpose for which the authorization is made must be adhered to. Allotments are granted for all appropriations except the operating accounts, such as Operation and Maintenance (O&M) and Research, Development, Test, and Evaluation (RDT&E), which use operating budgets. All allotments must be accounted for until the

appropriation lapses or until all obligations are liquidated, whichever occurs first, and are reported on NAVCOMPT form 2025 (Status of Allotment Report).

ALTERNATIVES: Two or more possible ways to fulfill the same objective. Ideally, the most cost effective approach is the one selected. See COST EFFECTIVE ALTERNATIVE.

APPLIED COST: See COST, APPLIED.

APPORTIONMENT: A determination made by the Office of Management and Budget which limits the amount of obligations or expenditures which may be incurred during a specified time period. An apportionment may limit all obligations to be incurred during the specified period or it may limit obligations to be incurred for a specific activity, function, project, object, or combination thereof.

APPROPRIATION: Budget authority granted by Congress which allows agencies to incur obligations and make expenditures for specific purposes and in specific amounts. Refer to paragraph 1001.6.

ASSUMPTIONS: Judgments pertaining to unknown factors which in cost analyses are made in determining alternative courses of action.

AUTHORIZATION: Annual legislation emanating from certain congressional committees which authorizes appropriations for specified purposes. For example, the Armed Services of the two Houses authorize appropriations for DoD for such things as weapons procurement, military end strength, and military training student loans. Authorization does not constitute an appropriation or convey obligational authority.

AVAILABILITY: A measure of the degree to which an item is in the operable and committable state at the start of a mission when mission is called for an unknown (random) time.

AVERAGE: A number that typifies a set of numbers related to a common subject. There are different types of averages: their application varies with the problem involved. See: MEAN, MEDIAN, MODE, AND SAMPLE.

AVERAGE COST: See: COST, AVERAGE.

AVERAGE UNIT FLYAWAY COST: The cost related to the production of a usable end-item of military hardware. Flyaway cost is defined in DoD 7000.1M and includes the cost of procuring the basic unit (airframe, hull, chassis, etc.), a percentage of

basic unit for changes allowance, propulsion equipment, electronics, armament, other installed Government-furnished equipment, and nonrecurring production costs. Flyaway cost equates to rollaway and sailaway cost.

BASE PERIOD: The time interval selected to determine the base values of variables for use in current planning and programming and/or the time interval to which index numbers relate. A reference period which determines a fixed-price level for comparison in economic escalation calculations. The price level index for the base year is 1.000. If specified date is prior, escalate, if subsequent, deflate for cost comparison. In programming it is traditional to use the fiscal year plus one as the base year; i.e., 1 October 1989 marked the beginning of FY90 and programming base year FY-91. See INDEX NUMBER. Also refer to paragraph 1001.3 and Table 7A1, Cost Deflators/Inflators.

BASELINE COST ESTIMATE: A detailed estimate of acquisition and ownership costs. This estimate is performed early in the program and serves as the base-point for all subsequent tracking and auditing purposes.

BENEFIT: Degree of attainment in terms of an objective sought, rather than in terms of output per se. For example, if one objective of the Marine Corps was, by 1988, to have 100 percent of its recruits be high school graduates, then a potential measure of benefit attributable to a program would be the increase in the percentage of high school graduates.

BENEFIT ANALYSIS: Examination to identify, measure, and evaluate the benefits for each proposed alternative. See BENEFIT.

BENEFIT-COST: See COST-BENEFIT ANALYSIS.

BUDGET: A plan of operations for a fiscal period in terms of (a) estimated costs, obligations, and expenditures; (b) source of funds for financing including anticipated reimbursements and other resources; and (c) history and workload data for the projected programs and activities.

BUDGE AUTHORITY: Authority provided by law to enter into obligations which generally result in immediate or future outlays of Government funds. The basic forms of budget authority are: appropriations, contract authority, and borrowing authority.

BUDGET YEAR: The year following the current fiscal year for which the budget estimate is prepared. For example, if the

current fiscal year is FY-90, the budget year would be FY-91.

BUDGETING: The process of translating planning and programming decisions into specific projected financial plans. Budgets are short-range segments of adopted action programs which set out planned accomplishments and estimate the resources to be applied for the budget periods to attain those accomplishments.

COMMON COST: See: COST, COMMON.

CONSTANT BUDGET DOLLARS: Constant budget dollars are partially escalated. As with constant dollars, they assume funds will be obligated in the base year, but outlay is assumed to be per historical outlay patterns. Thus, additional dollars to cover escalation experienced during the outlay period are included.

CONSTANT DOLLARS: Constant dollars or "now-year dollars" include no escalation. They assume a product will be ordered and delivered in the base year and all funds will be obligated and outlaid within the same year. Constant dollar values remove the effect of inflation. Thus costs in 1967, for instance, can be compared to those in 1985. Derived by using indices, see INDEX NUMBER and BASE PERIOD. Refer to Table 7A1, COST DEFLATORS/INFLATORS.

COST: The value of resources expended or given up in producing goods or services. See: COST ALLOCATION; COST, INDIRECT; and COST, OPPORTUNITY.

COST ACCOUNT: A management control point at which actual costs can be accumulated and compared to budgeted cost for work performed. A cost account is a natural control point for cost/schedule planning and control, since it represents the work assigned to one responsible organizational element on the contract work breakdown structure element.

COST, ACTUAL: Cost incurred in fact as opposed to standard or estimated cost. See: COST, STANDARD AND COST, ESTIMATED. Refer to paragraph 1001.5.

COST ALLOCATION: The portion of joint or indirect assets assigned to a particular objective such as a job, a service, a project, or a program. See: COST, INDIRECT. Refer to paragraph 1001.5.

COST ANALYSIS: Determination of actual or estimated costs of relevant spending options. Its purpose is to translate the physical resource requirements (equipment, personnel, etc.) associated with alternatives into estimated dollar costs. The

translation produces direct cost comparisons among alternatives. A process employed to develop or assess the reasonableness and validity of resources requirement estimates for military systems and programs. This process includes a statement or report of the assessment together with related conclusions. See: COST, ACTUAL and COST, ESTIMATED. Also refer to paragraph 1002.

COST APPLIED: The value of resources consumed during a given period regardless of when ordered, received, or paid for. Generally, applied costs are related to program outputs so that such costs become the financial measures of resources consumed or applied in accomplishing a specific purpose.

COST, AVERAGE: The quotient of total cost divided by corresponding output. Also, the sum of average fixed-cost per unit of output plus average variable cost per unit of the same output. See: COST, FIXED and COST, VARIABLE. Refer to paragraph 1001.

COST BENEFIT ANALYSIS: Comparison of present values of all benefits less those of related costs, where benefits can be valued in dollars the same way as costs. The purpose is to select the alternative which maximizes the present value of the net benefit of the alternative or program and to select the best combination of alternatives or programs. See: PRESENT VALUE. Refer to Table 7A2, Present Value/Discount Factors.

COST CENTER: A group of homogeneous functions for which identification of costs is desired and which is amenable to cost control through one responsible supervisor.

COST, COMMON: See: COST, INDIRECT and COST, JOINT.

COST CONTROL: A system for keeping actual costs within standardized limits. See COST, STANDARD.

COST, DIRECT: Any cost which is identified specifically with a particular final cost objective or goal. It is not necessarily limited to items incorporated into the end product as labor or material. Can be either fixed or variable. See: COST OBJECTIVE. Refer to Tables 4A1 through 4A4.

COST EFFECTIVE ALTERNATIVE: That alternative which (1) maximizes benefits when costs for each alternative are equal (the most effective alternative); or (2) minimizes cost when benefits are equal for each alternative (the most efficient alternative); or (3) maximizes differential output per dollar difference when costs and benefits of all alternatives are unequal. See: COST BENEFIT ANALYSIS, EFFECTIVENESS, AND

EFFICIENCY.

COST EFFECTIVENESS: A comparative evaluation derived from analysis of alternatives (action, methods, approaches, equipment, weapon systems, support systems, force combinations, etc.) in terms of the interrelated influences of cost and effectiveness in accomplishing a specific mission.

COST EFFECTIVENESS ANALYSIS: The quantitative examination of alternative systems for the purpose of identifying the preferred one and its associated equipment, organizations, etc. The examination aims at finding more precise answers to questions and not at justifying a conclusion. The analytical process includes tradeoffs among alternatives, design of additional alternatives, and the measurement of the effectiveness and cost of the alternatives. See: COST EFFECTIVE ALTERNATIVE. Refer to Table 7A1, Cost Deflators/Inflators and Table 7A2, Present Value/Discount Factors.

COST ELEMENTS: The segments of total cost given separate treatment in the analysis. See: COST, DIRECT and COST, INDIRECT. Refer to Tables 4A1 through 4A4 and 4B1.

COST ESTIMATE: A result or product of an estimating procedure which specifies the expected dollar cost required to perform a stipulated task or to acquire an item. A cost estimate may constitute a single value or a range of values.

COST ESTIMATING RELATIONSHIP (CER): A mathematical relationship which defines cost as a function of one or more parameters such as performance, operating characteristics, physical characteristics and a particular cost associated with it. The expression may be a simple average, percentage, or a complex equation. For example, estimated costs of an aircraft airframe (dependent variable) might be determined, using regression analysis, to be a function of airframe weight, delivery rates and speed (independent variables). The CER shows how the value of such independent variables are converted into estimated costs. See: COST, ESTIMATED and REGRESSION ANALYSIS.

COST, ESTIMATED: A cost projected for expected transactions, based upon information available. Does not pertain to estimates of costs already incurred. See: COST, STANDARD. Refer to paragraph 1002.

COST, FIXED: Cost incurred whether or not any quantity of an item is produced. Does not fluctuate with variable outputs.

For example, the rental cost for a facility might be treated as a fixed cost because it does not vary with output. See: COST, VARIABLE.

COST GROWTH: The marginal increase in cost of a program that has not grown in terms of benefit, output, or level of activity.

COST, IMPUTED: A cost that does not appear in accounting records and does not entail dollar outlays. For example, interest on ownership equity in facilities as a part of operating expenses.

COST, INCREMENTAL: Increase in costs per unit increase in output. If incremental cost per ton is $100 for an increase in production from 100 to 150 tons per month but only $75 per ton for an increase in output to 200 tons per month, the incremental cost in total operations would be $5000 for adding 50 tons of output and only $7500 for adding 100 tons per month. See: COST, AVERAGE and COST, MARGINAL. Refer to paragraph 1001.1.

COST, INDIRECT: Any cost not usually identified with a single final cost objective. Includes overhead and other fixed-costs and categories of resources other than direct costs, required to add up all segments of total cost. For example, the cost of bookkeeping is often not identified with a single type of output. See: COST, FIXED. Refer to Tables 4A1 through 4A4.

COST, INDUCED: All uncompensated adverse effects caused by the construction and operations on a project or program. For example, deterioration in environmental quality resulting from a water resource project.

COST, JOINT: Costs shared by two or more activities.

COST, MARGINAL: Change in total cost due to a change in the cost of the next unit output. It is a special case of the more general term, incremental cost. See: COST, AVERAGE and COST, INCREMENTAL. Refer to paragraph 1001.1.

COST OBJECTIVE FINAL: A cost objective which had allocated to it both direct and indirect costs and, in the contractor’s accounting, is the final cost accumulation point. See: COST ALLOCATION; COST, DIRECT; and COST, INDIRECT.

COST AND OPERATIONAL EFFECTIVENESS ANALYSIS (COEA): A COEA is an analysis of the costs and operational effectiveness for each of a set of alternative courses of action to meet stated needs. In the material acquisition process, the COEA produces

information regarding the estimated costs and operational effectiveness of alternative material systems and the associated programs for acquiring each alternative.

COST, OPPORTUNITY: The benefits which might have been realized by one alternative use of resources, but which are lost if these resources are used in another option. See: COST. Refer to Table 7A1, Cost Deflators/Inflators.

COST OVERRUN (UNDERRUN): The net change in an estimated or actual amount, from a base figure previously established, which is not attributable to any other cause of cost growth. Refer to Table 7A1, Cost, Actual.

COST, STANDARD: A predetermined cost criterion. A basis for pricing outputs, evaluating performance, and preparing budgets. May be expressed as unit cost for an item or as a total cost for a program. See: COST ACTUAL.

COST, SUNK: A resource which has already been consumed as the result of a prior decision and is not recoverable. Sunk costs have no bearing on current investment decisions because the resources are lost regardless of the course of action taken. For example, past R&D investment in a project represents a sunk cost and is not relevant in deciding whether or not to continue.

COST, TOTAL: Sum of fixed and variable costs.

COST, UNDISTRIBv: Cost incurred but not allocable to specific projects or programs, such as overhead costs for staff personnel working on several projects or programs. See: COST, INDIRECT.

COST, UNIT: Cost of any type per unit of output.

COST, VARIABLE: Cost which varies with the quantity of output produced.

CURRENT YEAR: The fiscal year in progress. See: BUDGET YEAR.

CURRENT-YEAR DOLLARS OR THEN-YEAR DOLLARS: Dollars which include the effects of escalation and reflect the price levels expected to prevail when the expenditure is actually made.

DATA: Numeric information or evidence of any kind.

DEPENDABILITY: A measure of the item operating condition at one or more points during the mission, including the effects of

reliability, maintainability, and survivability, given the item condition(s) at the start of the mission. It may be stated as the probability that an item will (a) enter or occupy any one of its required operational modes during a specific mission, and (b) perform the functions associated with those operational modes.

DEPRECIATION: The reduction in the value of an asset estimated to have occurred during an accounting period due to age, wear, usage, obsolescence, or the effects of natural elements such as decay or corrosion; i.e., the value of an asset "used up."

DESIGN TO COST: Management concept wherein rigorous cost goals are established during development and the control of systems costs (acquisition, operating, and support) to these goals is achieved by practical tradeoffs between operational capability, performance, costs, and schedule. Cost, as a key design parameter, is addressed on a continuing basis and as an inherent part of the development and production process.

DETAILED COST ESTIMATE: Sometimes referred to as "grass roots" or "bottoms-up" estimate. An industrial engineering based approach relying on detailed simulation of all the operations, and an exhaustive list of all the materials required to develop and produce a unique and specifically defined piece of equipment. This procedure utilizes a combination of engineered standards produced from time and motion studies, cost standards, vendor quotes man loading requirement by work center, and station in conjunction with appropriate rates and factors.

DIRECT COST: See: COST DIRECT.

DISCOUNT FACTOR: The discount factor applies a discount rate (see below) to future dollar amounts. It is the interest rate used in calculating the present value of extended yearly costs. It translates expected cost of benefit in any specific future year into its present value. Mathematically, the discount factor is

1/(1+R)t where r is the discount rate and t is the number of elapsed years. See: PRESENT VALUE. Refer to Table 7A2, Present Value/Discount Factors.

DISCOUNT RATE: In theory, it is the preference for having something now rather than later. In practice, it is the interest rate used in calculating the present value of expected yearly costs and benefits. It represents the cost of capital or the interest rate currently obtainable on loanable funds. For DoD the discount rate is 10 percent. This represents the

average rate of return of capital in the private sector (excluding inflation). See: PRESENT VALUE. Refer to Table 7A2, Present Value/Discount Factors.

DISCOUNTING: A computational technique using a discount rate to calculate present value of future benefits and costs. Used in evaluating alternative investment proposals that can be valued in money. Assumes an investment proposal should be accepted if the present value of its projected earnings exceeds the amount of the investment. See: PRESENT VALUE. Refer to Table 7A2, Present Value/Discount Factors.

ECONOMIC ANALYSIS: A systematic approach to the problem of choosing how to employ scarce resources, and an investigation of the full implications of achieving a given objective in the most efficient and effective manner. The determination of efficiency and effectiveness is implicit in the assessment of the cost effectiveness or alternative approaches. See: COST EFFECTIVENESS ANALYSIS, EFFICIENCY, PROGRAM ANALYSIS, PROGRAM EVALUATION, and SYSTEMS ANALYSIS. Refer to paragraph 1002.

ECONOMIC EFFICIENCY: That mix of alternative factors of production (resources, activities, programs, etc.,) that results in maximum outputs, benefits, or utility for a given cost; alternatively, it represents the minimum cost at which a specified level of output can be maintained. Often, because of numerous constraints on costs, programs, and activities, the term is used to refer to an alternative which is more efficient than another. Thus, program A may be referred to as being more economically efficient than alternative program B. See: COST EFFECTIVE ALTERNATIVE, EFFECTIVENESS, and EFFICIENCY.

ECONOMIC LIFE: The period of time over which the benefits to be gained from an investment may reasonably be expected to accrue. (Although economic life is not necessarily the same as mission life, physical life, or technological life, it is significantly affected by both the obsolescence of the investment itself and the purpose it is designed to achieve.) The economic life of an investment begins in the year in which the investment

starts producing benefits. Thus, it is possible the investment may occur several years prior to the start of an alternative's economic life. See: INVESTMENT and INVESTMENT PERIOD.

ECONOMIES OF SCALE: Reductions in unit cost of output resulting from the production of additional units. Stems from (a) increased specialization of labor as volume of output increases, (b) decreased unit costs of materials, (c) better utilization of management, (d) acquisition of more efficient equipment, and (e) greater use of by-products. For example,

the cost of producing a new aircraft for which the prototype cost $30 million, might be $3 million each for 100 aircraft and only $1 million each for 1000 aircraft due to economies of scale.

EFFECTIVENESS: Performance toward an objective. Ideally, it is a quantitative measure which can be used to evaluate the performance level achieved in relation to criteria pertaining to end objectives. An example of such a measure would be the increase in annual earnings of a group of participants in a Federal retaining program. This example assumes an objective of the retaining program is to increase the level of income of program participants. Under this assumption, a measure of output, such as the number of people who completed the program, while informative, would not be a valid measure of effectiveness since the objective is to increase income, not merely to retain people. Thus, a program can be efficient but ineffective and vice versa. See: BENEFIT and EFFICIENCY.

EFFICIENCY: The degree to which outputs are maximized as inputs are minimized. See: EFFECTIVENESS.

ESCALATION: Escalation is not synonymous with inflation, but includes cost growth associated with inflation as well a non-inflationary "real" cost growth. Real cost growth changes are caused by supply and demand and other economic forces, changes in design, quantity and schedule, estimating changes and errors, and other factors.

ESTIMATED COST: See: COST, ESTIMATED.

EXPENDITURES: A charge against available funds. It is evidenced by voucher, claim, or the document approved by competent authority. Expenditure represents the actual payment of funds.

EXPENSES: Cost of Operation and Maintenance of activities on the accrual basis over time, as distinguished from costs of acquisition of property. Expenses include, but are not limited to, costs of (a) civilian personnel services, (b) military personnel services, (c) supplies and material consumed or applied, (d) travel and transportation of personnel, (e) rental

of facilities and equipment, (f) equipment (unit value less than $15,000), and (g) services received (purchased utilities, leased communications, printing and reproduction, and other). The cost of minor construction of a value of $100,000 or less is included as an expense.

FACTOR ANALYSIS: A technique for reducing the number of

variables to be included in a model. A factor is a grouping of variables which appear to represent the same underlying characteristics. Factor analysis proceeds on the premise that a large number of variables may be grouped into a smaller number of variables or factors representative of the original variables, with little or no loss of discriminatory information. For example, a large number of population summaries based on variables such as age, occupation, education, fertility, home ownership, race, sex, etc., might be reduced to three factors: economic category, family type, and ethnic status (depending upon the purpose to be served by the data). Correlation and regression analysis are often used in determining which variables will be retained in the model. See: REGRESSION ANALYSIS. Refer to paragraph 1002.2a.

FIRST AND SECOND DESTINATION TRANSPORTATION CHARGES: Knowing the size, weight, and security measures needed for shipping your system, first destination transportation charges are the cost to ship the system from the manufacturer to Albany and/or Barstow. Second destination transportation charges are the costs associated with transporting your system from Albany/Barstow to the user(s).

FISCAL YEAR (FY): Accounting period beginning 1 October and ending 30 September of the following calendar year. The FY is designated by the calendar year in which it ends. FY90 begins on 1 October 1989, and ends 30 September 1990.

FUTURE-YEARS DEFENSE PROGRAM (FYDP): The FYDP summarizes all approved programs of the entire DoD. Resources or inputs required for 5 years are combined with military outputs or programs for the same period. The FYDP is expressed in terms of programs, program elements, and resource categories: (a) mission operations, (b) administration, (c) supply operations (d) maintenance of material, (e) property disposal (f) medical operations (g) base services, (h) maintenance of real property, (i) utility operations, (j) other engineering support, (k) minor construction, and (1) personal support.

FYDP DOLLARS: FYDP or "Then-year dollars," are fully escalated. They include the escalation for outlay built into constant budget dollars as well as escalation to cover the period between the base year and the first year of program execution. FYDP dollars in the base year are equal to constant budget dollars.

GOVERNMENT FURNISHED/ADDED EQUIPMENT: Items in the possession of, or acquired by, the Government and delivered or otherwise made available to the contractor for use in manufacturing the system. Examples: batteries, cables, wires, tires, etc.

HOMOGENEOUS MAJOR SYSTEM: A system in its total context that has one reliability and maintainability rate. Examples: a rifle, most radios, most vehicles, a computer, generators, etc.

IMPUTED COST: See: COST, IMPUTED.

INCREMENTAL COST: See: COST, INCREMENTAL.

INDEPENDENT COST ESTIMATE: An estimate of program cost developed outside normal advocacy channels by a team which generally includes representation from cost analysis procurement, production management, engineering, and program management.

INDEPENDENT GOVERNMENT COST ESTIMATE: An estimate of the cost for goods and/or estimate services to be procured by contract. Such estimates are prepared by Government personnel; i.e., independent contractors.

INDEX: Statistical device for measuring changes in groups of data. Serves as a yard stick of comparative measure. See: INDEX NUMBER.

INDEX NUMBER: A number used to measure change by relating a variable in one period to the same variable in a base period. The index number is usually found by dividing the variable by the base period value and multiplying by 100. For example, in the following table, 1966 is the base year and the budget column entries from 1967 through 1970 are the variables. By dividing the 1967 budget by the base period value and then multiplying by 100, index A for FY 1967 is derived. Sometimes a 3 year period is used as a base and an average of the 3 years must be taken as the base. See: BASE PERIOD. Refer to paragraph 1001.3 and Table 7A1, Cost Deflators/Inflators.

INDIRECT COST: See: COST, INDIRECT.

INDUCED COST: See: COST, INDUCED.

INFLATION: The upward movement of price levels over time. Decrease in the value of money due to rising prices. Inflation is sometimes ignored in program analysis by assuming constant prices. When there is reason to believe changes in price levels will affect the choice between alternatives, the current dollar estimates are converted to constant dollar estimates.

See CONSTANT DOLLARS. Refer to paragraph 1001.3 and to Table 7A1, Cost Deflators/Inflators.

INFORMATION SYSTEM: An organized collection, storage, and presentation system of data for decision making. Can be either

manual, computerized, or a combination of both.

INITIAL PROVISIONING SPARES/PARTS: When the system is distributed to the user, some quantity of spares and replacement parts will accompany the system. These spares and repair parts are furnished to the various levels of maintenance to establish the maintenance capability. They are funded from PMC vice O&MMC.

INTEGRATED LOGISTICS SUPPORT (ILS): A composite of all the support considerations necessary to assure the effective and economical support of a system for its life cycle. It is an integral part of all other aspects of system acquisition and operation. ILS is characterized by harmony and coherence among all the logistic elements. The principal elements of ILS related to the overall system life cycle include:

(a) Maintenance Plan
(b) Support and Test Equipment
(c) Supply Support
(d) Transportation and Handling
(e) Technical Data
(f) Facilities
(g) Personnel and Training
(h) Logistics Support Resource Funds
(i) Logistics Support Management Information

INTEREST: Price paid for the use of money. See: DISCOUNTING AND PRESENT VALUE.

ITERATIVE PROCESS: A process which uses a repeating value that comes closer to the desired result with each repetition.

INVESTMENT: Costs associated with the acquisition of real property and major end items of equipment.

INVESTMENT PERIOD: The period of time, in years, from the start of investment until the investment is completed. Many investments are made for 2 or more years, with investment periods occurring in stages. For example, 100 tanks may be delivered the first year, with investment periods occurring in stages. For example, 100 tanks may be delivered the first year, 300 the second year, etc., until the total investment has been accomplished. See: ECONOMIC LIFE and INVESTMENT.

JOINT COST: See: COST, JOINT.

LEAST-COST ALTERNATIVE: The alternative producing, at least cost, the same or greater quantity of given output than any other alternative. See: ECONOMIC EFFICIENCY, EFFECTIVENESS, and EFFICIENCY.

LIFE-CYCLE COST: The total cost to the Government for the development, acquisition, operation, logistic support, and where applicable, disposal of a system or set of forces over a defined life span. See: LIFE-CYCLE COSTING.

LIFE-CYCLE COSTING: An acquisition technique that considers operating, maintenance, and other costs of ownership as well as acquisition price in the award of contracts for hardware and related support. See: LIFE-CYCLE COST.

LOGISTIC SUPPORT: The composite of actions necessary to assure the effective and economical performance of the systems and equipments which, functioning together, comprise a weapons system and in turn, and operating force.

MAINTAINABILITY: A characteristic of design and installation which inherently provides for an item to be retained in or restored to a specific condition within a given time, when it is maintained per prescribed procedures and resources.

MARGINAL ANALYSIS: Technique for evaluating an added increment. A basis for comparing the added cost to the benefit gained. The term "marginal" refers to the last increment of whatever is being considered. Benefits per unit of cost will be maximized when the additional increment of revenues and additional increment of costs are equal. See: COST, MARGINAL. Refer to paragraph 1001.1.

MARGINAL COST: See: COST, MARGINAL.

MARGINAL COST PER UNIT OF INPUT: The change in total cost resulting from a one-unit change in variable input.

MARKUP; MARK: Adjustments to budget submissions by NAVCOMPT, OSD, or OMB analysts. Markups are ordinarily subject to reclama. See: RECLAMA.

MEAN: One of the kinds of averages. The mean (also called arithmetic mean) is what is usually connoted by the term "average." It is computed by summing the values of the items being observed and dividing by the number of observed items. See AVERAGE, MEDIAN, and MODE. Refer to paragraph 1001.1.

MEASURE OF EFFECTIVENESS: The quantitative expression (sometimes modified by subjective judgment) of the success of a system in achieving a specified objective.

MEDIAN: The central value of a set of observations, such as incomes, arranged in order of magnitude. It is that value which divides the set so an equal number of items are on

either side of it. For example, if we have five items; i.e., 4, 7, 9, 12, 15, the median would be 9 since there are two items above that value and two items below it. If we have an even number of items, the median would be calculated as halfway between the central two items. For example, if we have six items; 4, 7, 9, 12, 15, 20, the median would be calculated: 9+12=10.5. See: AVERAGE, MEAN, and MODE.

MODE: The observation which occurs most frequently in a set of observations. It is a measure of central tendency in a frequency distribution. Often used to average weekly sales and purchases. For example, in the distribution: 2, 3, 5, 5, 8, 12, the mode is 5. More than one mode (bimodal, trimodal), or no mode, is possible when all the values in the distribution are different. See: AVERAGE, MEAN, and MEDIAN.

MODEL: A representation of the relationships which define a system or situation under study. Its purpose is to predict what will happen when a system becomes operational in terms of performance and output. A model may be a set of mathematical equations, a computer program, or any other type of representation, ranging from verbal statements to physical objects. Models permit the manipulation of variables to determine how a process, subject, or concept would behave in different situations. For example, the equation D = r x t represents a simple model indicating distance is equal to the rate of travel times the time of travel.

MULTIYEAR PROCUREMENT: A method of competitively purchasing up to a 5 year requirement in one contract which is funded annually as appropriations permit. If necessary to cancel the remaining quantities in any year, the contractor is paid an agreed-upon portion of the unamortized nonrecurring start-up costs.

OBJECTIVES: Statements of what we are trying to accomplish and why set forth, if possible, in measurable terms. In analysis, objectives are stated in a manner which does not preclude alternative approaches.

OBLIGATION: A duty to make a future payment of money. The duty is incurred as soon as an order is placed or a contract is awarded for the delivery of goods and/or performance of services. It is not necessary that goods actually be delivered or services

actually be performed, before the obligation is created; neither is it necessary that a bill or invoice be received. The placement of an order is sufficient. An obligation legally encumbers a specified sum of money which will require outlay(s) or expenditure(s) in the future.

OBLIGATIONAL AUTHORITY: (a) An authorization by Act of Congress to procure goods and services within a specified amount by appropriation or other authorization; (b) the administrative extension of such authority, as by apportionment or funding; and (c) the amount of authority so granted.

OPERATING AND SUPPORT COST: Those resources required to operate and support a system, subsystem, or a major component during its useful life in the operational inventory.

OPERATING BUDGET - OPBUD OR OB: An OPBUD or OB is the annual budget of an activity stated in terms of budget classification code, functional/subfunctional categories, and cost accounts. It contains estimates of the total value of resources required for the performance of the mission including reimbursable work or services for others. It also includes estimates of workload in terms of total work units identified by cost accounts.

OPERATIONAL EFFECTIVENESS: The overall degree of mission accomplishment of a system when used by representative troops in the context of the organization, doctrine, tactics, threat, and environment in the planned operational employment of the system.

OPERATIONAL SUITABILITY: The degree to which an operationally effective system can be satisfactorily placed in field use, with consideration being given to availability, producibility, transportability, interoperability, reliability, maintainability, and the other "ilities."

OPERATIONS RESEARCH (OR): The professional and academic field concerned with the systematic effort to provide decisions. Operations Research may present a proposed solution to a problem or present the pros and cons of alternatives. A distinctive feature of OR is its application of one or a combination of the scientific disciplines such as mathematics, economics, cost analysis, linear programming, statistics, etc., in addition to subjective methods such as common sense and judgments based on experience. Operations Research might, for example, be used by the Marine Corps to ascertain the most efficient method of transporting supplies around the world. The best procedures for doing so could be determined by developing and analyzing a mathematical model of the Marine Corps material distribution system. See: ECONOMIC ANALYSIS, PROGRAM ANALYSIS, PROGRAM EVALUATION, and SYSTEMS ANALYSIS.

OPPORTUNITY COST: See: COST, OPPORTUNITY.

OUT-OF-POCKET COSTS: Costs associated with the decision under consideration which require dollar outlays. They may be contrasted with those costs, such as depreciation, which are in

reality allocations of previously incurred costs. See: COST ALLOCATIONS.

OUTLAY: The actual process of transferring funds from the Treasury to pay for goods and services. Outlay rates used in programming reflect historical spending patterns and the fact that although we ask for and receive full obligational authority "up front" we do not spend our money that way. Program costs are subject to escalation during the outlay period. Outlay rates used during the POM are published by the Assistant Secretary of Defense (Comptroller).

OUTPUT: Program results, such as goods produced and services performed, expressed in quantities relatable to specific inputs, organizational missions, and functions. Outputs provide a basis for evaluating the productivity and efficiency of an organization or activity. See: BENEFITS, EFFECTIVENESS, and EFFICIENCY.

OTHER DIRECT SYSTEM COSTS: These costs include such items as test equipment, manuals (operator and maintenance), calibration tools, test stands, special tools, etc.

PARAMETRIC COST ESTIMATE: A cost estimating methodology using statistical relationships between historical costs and other program variables such as system physical or performance characteristics, contractor output measures, manpower loading, etc. Also referred to as top-down approach.

PAYBACK PERIOD: The length of time required for an investment outlay to be recovered. Also referred to as payoff period or cash recovery period. See: INVESTMENT and INVESTMENT PERIOD. Refer to Table 7B1, Investment Payback.

PERFORMANCE BUDGET: A budget which focuses attention upon the general character and relative importance of the work to be done by taking as its basis the estimated cost of programs, functions, and projects designed to accomplish a mission. Performance budgets focus on the cost of a function; for example, operating a rifle range, communications centers, motor pool - rather than the cost of "things" such as supplies, equipment, personnel services, etc.

PHYSICAL LIFE: The estimated number of years a machine, piece of equipment, building, etc., can be used in accomplishing the

function for which it was procured or constructed. See: ECONOMIC LIFE.

PLANNING: The identification of objectives of an organization and the selection of the best possible courses of action required to attain such objective in terms of relative costs and benefits.

Long-range (strategic) planning involves deciding the organization's business and how it is to be done. Short-range planning encompasses all other management planning responsibilities and focuses on studies and analyses make for the purpose of identifying the specific feasible means for carrying out the chosen courses of action. See: COST BENEFIT ANALYSIS and COST EFFECTIVENESS ANALYSIS. Refer to paragraph 1002.

PLANNING PROGRAMMING BUDGETING SYSTEM (PPBS): A management system
introduced in the Executive Branch in 1965 by the President, comprised of three elements as follows: (a) Planning - the study of objectives and alternative ways to achieve objectives, of future environments, and of contingencies and how to respond to them; (b) Programming - a method or system of describing activities according to objectives or outputs and of relating these objectives to the costs or inputs needed to produce the outputs of effectiveness desired; and (c) Budgeting - the activity through which funds are requested of the President and Congress, appropriated, apportioned, and accounted for.

POINTS OF CHANGE AND PERCENT CHANGE: Measures of change in an index. The terms "point of change" and "percent change" in the index do not mean the same thing. The former is the difference between indexes at two dates; the latter is the difference expressed as a percent of the index at the earlier of the two dates. For example, the rise in the index from 122.6 in April 1963 to 123.5 in July 1963 represents an increase of 0.9 points or an increase of .7 percent. The increase of 0.9 points is the difference between 123.5 and 122.6, while the 0.9 points of increase is 0.7 percent of the index of 122.6 in April (i.e., 0.9/122.6)

PRESENT VALUE (TIME VALUE OF FUTURE CASH FLOWS): In every investment, explicit recognition should be given to the fact a dollar today is worth more than a dollar tomorrow because of interest cost related to all Government expenditures. That is, dollar benefits which accrue in the future cannot be compared directly with investments made in the present because of the time value of money. Discounting is a technique for converting various cash flows to a common point in time to facilitate valid comparisons. Refer to paragraph 1001.3 and Table 7A2, Present Value/Discount Factors.

PRESENT-VALUE BENEFIT: Calculation of each year's expected benefit multiplied by its discount factor and then summed overall years of the planning period. See: PRESENT VALUE. Refer to Table 7A2, Present Value/Discount Factors.

PRESENT-VALUE COST: Calculation of each year's expected cost multiplied by its discount factor and then summed overall years

of the planning period. See: PRESENT VALUE. Refer to Table 7A2, Present Value/Discount Factors.

PROGRAM: A mission-oriented endeavor which is defined in terms of the principal actions required to achieve a significant objective. Refer to paragraph 1002.

PROGRAM ANALYSIS: The generation of options to accomplish objectives by comparing alternatives for proposed and ongoing programs. Embraces the processes involved in program planning, program evaluation, economic analysis, systems analysis, and operations research. See: PLANNING, PROGRAM EVALUATION, ECONOMIC ANALYSIS, SYSTEMS ANALYSIS, and OPERATIONS RESEARCH.

PROGRAM COST CATEGORIES: (a) Research and Development. Those program costs primarily associated with Research and Development efforts including the development of a new or improved capability to the point where it is ready for operational use. These costs include equipment costs funded under the RDT&E appropriation costs. They exclude costs which appear in the Military Personnel, Operation and Maintenance, and Procurement appropriations. (b) Investment. Those program costs required beyond the development phase to introduce into operational use a new capability; to procure initial, additional, or replacement equipment for operational forces; or to provide for major modifications of an existing capability. They include Procurement and Military Construction appropriation costs and exclude RDT&E, Military Personnel, and Operation and Maintenance appropriation costs. (c) Operating. Those program costs necessary to operate and maintain the capability. These costs include Military Personnel, and Operation and Maintenance.

PROGRAM ELEMENT: An integrated combination of men, equipment, and facilities which together constitute an identifiable military capability or support activity. It identifies the mission to be undertaken and the organizational entities to perform the mission. Elements may consist of forces, manpower, materials, services, and/or associated costs as applicable.

PROGRAM EVALUATION: Appraising the efficiency and effectiveness of ongoing or completed programs. Aims at program improvement through comparisons of existing programs with alternative programs and techniques. Uses actual performance data to gauge

progress towards program goals. See: EFFICIENCY, EFFECTIVENESS, and PROGRAM ANALYSIS.

PROGRAM FACTOR: A rate or ratio used in planning and budgeting to derive another program measure or cost, usually a ratio based

on
experience. For example, the rate of fuel consumption multiplied by flying hours programmed equal fuel consumption to be programmed. Refer to Table 4A3, Direct Costs Per Flight Hour and 4B2 Pol Costs.

PROGRAM FINANCIAL PLAN: A projection of the costs for each program relating outputs and benefits to costs and personnel requirements.

PROGRAMMING: The process of determining specific courses of action to be followed in carrying out planned decisions. The total costs to be incurred over a period of years as to personnel, material, and financial resources are considered. See: LIFE-CYCLE COSTING. Refer to paragraph 1004.

QUANTIFICATION: The measurement (not valuation) of the inputs, outputs, or benefits of a program. Consists of listing the magnitudes of all important results, favorable and unfavorable, to which a program will give rise, preferably in a few salient numbers which convey the essence of the choices to be made without forcing them, if possible, into monetary values.

RAM: Reliability, Availability, Maintainability.

RDT&E: RDT&E cost elements could include the costs for: Developmental Engineering, Producibility Engineering and Planning, Tools, Prototype Manufacturing, Data, System Test and Evaluation, Training Services and Equipment, and procurement of facilities for testing development.

RECLAMA: A written position paper which essentially attempts to reverse or reduce a budget markup made by NAVCOMPT, OSD, or OMB analysts. A reclama must contain justification other than what already appears in the budget, and not simply be a reiteration of previously submitted backup information. See: MARKUP; MARK.

RELIABILITY: A fundamental characteristic of an item of material expressed as the probability it will perform its intended function for a specified period of time under stated conditions.

REGRESSION ANALYSIS: A procedure for relating a dependent variable (the estimated variable) to one or more independent variable (the estimator). The relation is in the form of an estimating equation whose purpose is to predict one variable from specified values of others. See: FACTOR ANALYSIS.

RESOURCES: Assets available and anticipated for operations. Includes items to be converted into cash and intangibles, such as

people, equipment, facilities; and other things used to plan implement, and evaluate programs and/or systems.

RISK ASSESSMENT: The process of subjectively determining the probability a specific interplay of performance, schedule, and cost as an objective will not be attained along the planned course of action.

SAMPLE: A subject of a given group. Elements are selected intentionally as a microcosm representative of the group being studied. See: AVERAGE.

SAVINGS/INVESTMENT RATIO: A numerical ratio, used when comparing alternatives, of the difference in present value of future costs divided by the difference in investment costs. The ratio is an indication of the effectiveness of higher investments in producing future cost savings. Related to investment payback and/or return on investment, particularly in private industry. See: DISCOUNT RATE, EFFECTIVENESS, INVESTMENT, and PRESENT VALUE> Refer to table 7A2, Present Value/Discount Factors and Table 7B1, Investment Payback.

SELECTED ACQUISITION REPORTS: Standard, comprehensive, summary status reports on major defense systems for management within the DoD.

SERVICEABILITY: A measure of the degree to which servicing of an item will be accomplished with a given time under specified conditions.

SHOULD-COST ESTIMATE: An estimate of contract price which reflects reasonably achievable contractor economy and efficiency. It is accomplished by a Government team of procurement, contract administration, audit, and engineering representatives performing an in-depth cost analysis at the contractors' plants. Its purpose is to develop a realistic price objective for negotiation purposes.

STANDARD COST: See: COST, STANDARD.

SUNK COST: See: COST, SUNK.

SYSTEM: A total operating end item. A system has one set of RAM requirements which may be an aggregate of subsystems.

SYSTEM ANALYSIS: May be viewed as the systematic evaluation, normally through quantitative methods, of activities or alternative courses of action relevant to the attainment of

desired objectives. The aim is normally to present evaluations

to decisionmakers for their consideration. Such analysis emphasizes the system concept, under which any course of action designed to achieve an objective is viewed as a system requiring inputs and producing outputs. The inputs and outputs involved may take on any of a large variety of forms. In this sense, systems analysis encompasses both cost benefit and cost effectiveness analyses as well as other types of analyses which may be more limited in scope. See: COST BENEFIT ANALYSIS, COST EFFECTIVENESS ANALYSIS, and OPERATIONS RESEARCH.

SUBSYSTEMS: A subsystem is one of number of components which by themselves have their own maintenance schedules, and when organized together form a total operating end item. Examples: the Position Location Reporting System (PLRS), the Unit Level Circuit Switch (ULCS), and most aircraft, etc.

TOTAL COST: See: COST, TOTAL.

TOTAL OBLIGATIONAL AUTHORITY (TOA): TOA is the total amount of funds available for programming in a given year, regardless of the year the funds are appropriated, obligated, or expended. TOA includes new obligational authority, unprogrammed or reprogrammed obligational authority from prior years, reimbursements not used for replacement of inventory in kind, advance funding for programs to be financed in the future, and unobligated balances transferred from other appropriations.

UNDISTRIBUTED COST: See: COST, UNDISTRIBUTED.

UNIT COST: See: COST, UNIT.

VARIABLE COST: See: COST, VARIABLE.

WORK BREAKDOWN STRUCTURE: A product-oriented family tree division of hardware, software, services, and other work tasks which organizes, defines, and graphically display the product to be produced, as well as the work to be accomplished to achieve the specified product.

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